

Subsonic Investigation of a Leading-Edge Boundary Layer Contol Suction System on a High-Speed Civil Transport Configuration

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NASA/TM-1999-209700



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Summary

A wind tunnel investigation of a leading edge boundary layer control system was conducted on a High Speed Civil Transport (HSCT) configuration in the Langley 14- by 22-Foot Subsonic Tunnel. Data were obtained over a Mach number range of 0.08 to 0.27, with corresponding chord Reynolds numbers of 1.79×10^6 to 5.76×10^6 . Variations in the amount of suction, as well as the size and location of the suction area, were tested with outboard leading-edge flaps deflected 0° and 30°; and trailing-edge flaps deflected 0° and 20°. The longitudinal and lateral aerodynamic data are presented without analysis. A complete tabulated data listing is also presented herein.

Introduction

Investigations are currently being conducted at the NASA Langley Research Center to study ways of improving the subsonic high lift capability of conceptual High-Speed Civil Transport (HSCT) configurations. Typically, wings designed for supersonic cruise efficiency above Mach 2 incorporate high leading-edge sweep (i.e. 70° to 80°). However, during subsonic climbout phase of the flight envelope, these wings generally tend to produce large upper surface vortex flow structures. Although these vortices provide significant lift augmentation, they also result in increased drag and a poorer L/D ratio, thereby adversely affecting the community noise characteristics.

Over the years, several methods have been tried to manipulate the vortex flow field on the wings of HSCT configurations in order to improve their low speed L/D performance (references 1 thru 6). This test investigates a leading edge boundary layer control (BLC) suction scheme proposed by Boeing to control and/or suppress the leading edge vortex. Reference 7 discusses the planform geometry tested in this investigation prior to the modifications to include the leading-edge suction system.

The results presented herein were acquired at the NASA Langley 14- by 22-Foot Subsonic Tunnel. Data were obtained for the cruise and high-lift flap configurations (without vertical tails) for an angle-of-attack range from -6° to 20° over a Mach number range of 0.08 to 0.27. The corresponding Reynolds number, based on the mean aerodynamic chord, ranged from 1.79x10⁶ to 5.76x10⁶, respectively.

Symbols & Abbreviations

 A_S porous surface area, ft^2

	e e ft
а	speed of sound, $\frac{ft}{\sec}$
b	wing span, f
C_A	axial-force coefficient, $\frac{Axial force}{qS}$
C_D C_{D_O}	drag coefficient, $\frac{\text{Drag}}{qS}$
	zero-lift drag coefficient
C_L	lift coefficient, $\frac{\text{Lift}}{qS}$
C_l	rolling moment coefficient, $\frac{\text{Rolling moment}}{qSb}$
C_m	pitching moment coefficient, $\frac{\text{Pitching moment}}{qS\bar{c}}$
C_N	normal force coefficient, $\frac{\text{Normal force}}{qS}$
C_n	yawing moment coefficient, $\frac{\text{Yawing moment}}{qSb}$
C_q	suction coefficient, $\frac{\dot{m}}{\rho_{\infty}V_{\infty}A_{S}}$
$C_{\mathtt{Y}}$	side force coefficient, $\frac{\text{Side-force}}{qS}$
\overline{c}	mean aerodynamic chord, ft
D	drag, lb
\boldsymbol{L}	lift, <i>lb</i>
L/D	lift-to-drag ratio
М	Mach number, $\frac{V}{a}$
ṁ	suction mass flow rate, $\frac{lb}{sec}$
q	dynamic pressure, $\frac{lb}{ft^2}$
R	Reynolds number, $\frac{\rho Vc}{H}$

S wing reference area, ft^2

V velocity, $\frac{ft}{\sec}$

y spanwise location, measured from the fuselage centerline, ft

α angle of attack, deg

β angle of sideslip, deg

δ flap deflection angle, normal to hinge line (positive down), deg

 ξ suction chord length, measured normal to the leading edge as a percent of \overline{c}

 μ viscosity, $\frac{lb \cdot \sec}{ft^2}$

 $\rho \qquad \qquad \text{density, } \frac{\text{slug}}{ft^3}$

Subscripts:

L leading edge

T trailing edge

of free stream conditions

Abbreviations:

avg average value

HSCT high-speed civil transport

i inboard wing

o outboard wing

Model Description

Wind Tunnel Model

A geometric description of the model tested in this investigation is presented in figure 1. A photograph of the model mounted in the Langley 14- by 22-Foot Subsonic Tunnel is presented in figure 2. This model incorporates the required twist and camber for a Mach 2.7 design cruise speed. The wing has an inboard sweep of 73.02° and an outboard sweep of 60°. The flap system consists of leading-edge flap segments and partial span trailing-edge flap segments spaced to accommodate engine nacelle placement (see figure 3). Tests were conducted in three configurations: flaps undeflected (cruise), trailing-edge flaps deflected 20°, and leading-edge outboard flaps and trailing-edge flaps deflected 30° and 20°, respectively. For all flap deflected configurations, the inboard leading-edge flap, which incorporates the suction system out to 60 percent span, remained undeflected. Transition grit (number 60 size) was applied to both the forebody and the wing lower surface leading-edge to fix boundary-layer transition from laminar to turbulent flow. During this investigation the model had no canards, tail surfaces, or engine nacelles. The geometric characteristics are presented in Table 1.

Suction System

The suction system, shown in figure 4, consisted of a perforated titanium skin fitted over a suction plenum within the leading-edge of the inboard 73.02° swept section. The perforated skin was formed to replace the solid wing upper surface in that region. The perforations were 0.002 inches in diameter, with a spacing representative of a cosine distribution in a line normal to the leading-edge (i.e. more densely spaced near the leading-edge). The spanwise perforation spacing was also denser in the wing outboard region. The suction plenum was in turn connected to a larger flow cavity through a series of holes to minimize spanwise internal pressure losses. The suction air was removed via a vacuum pump. The suction air flow rate was measured by two mass flow meters, one for each side, and was adjusted via remotely controlled, motor-driven flow control valves. A solenoid valve provided rapid suction on/off capability. Variations of the suction area and suction location were accomplished by masking areas of the perforated titanium skin according to the patterns depicted in figure 5.

Test Conditions & Instrumentation

Tests were conducted in the Langley 14- by 22-Foot Subsonic Tunnel (reference 8). Test Mach numbers, dynamic pressures, and Reynolds numbers based on the wing mean aerodynamic chord were as follows:

Mach number, M	Dynamic pressure, q, psf	Reynolds number, R, x 10 ⁶
0.08	10	1.79
0.12	20	2.44
0.18	50	3.88
0.27	110	5.76

Tests were conducted over an angle-of-attack range from -6° to 20°; with selected configurations also being tested through $\pm 15^{\circ}$ of sideslip at fixed angle of attack. All configurations had zero roll angle.

A six-component strain-gauge balance mounted inside the fuselage measured the forces and moments. The accuracy of this strain-gauge balance is presented in Appendix A.

Balance loads induced from the suction system were minimized via a flexible bellows hose, which prevented a rigid load path from developing between the vacuum supply line and the balance. The residual vacuum induced loads were measured with tunnel wind off as a function of suction level and subsequently removed from the wind on aerodynamic loads.

Angle of attack was measured by an accelerometer installed in the model; whereas, the angle of sideslip was measured via a digital encoder mounted to the turntable drive mechanism of the model support system.

The data were corrected for jet-boundary and blockage effects according to the methods of references 9 and 10. No corrections were made for flow angularity or local support system flow interference.

Presentation of Data

An index to the aerodynamic data acquired during this investigation is presented in Table 2, with a complete tabular listing of the data being presented in Table 3. Plots depicting the longitudinal and lateral aerodynamic data are presented herein, without analysis, in the following groupings:

Topic	Figure
System Plumbing Effects	
Suction line connected to left wing only, Case VI	•
Suction lines disconnected, Case VI	. 6
Full suction on left wing, Case I.	. 7
Full suction on both wings, Case I	. 8
	9
Dynamic Pressure Effects	
Case VI, tunnel dynamic pressure effects	10
Case IV, tunnel dynamic pressure effects	11
Case III, tunnel dynamic pressure effects	12
Case III, tunnel dynamic pressure effects, repeat runs	13
Parametric Suction Effects, $\delta_L=0$, $\delta_T=0$	
Case I, suction variations, q=20 psf	1.4
Case I, suction variations, q=50 psf	
Case I, suction variations, q=110 psf	15
Case II, suction variations, q=10 psi	16
Case II, suction variations, q=50 psf Case III, recirculation effects over test q range	17
Case III suction variations a=20 nef	18
Case III, suction variations, q=20 psf Case III, suction variations, q=50 psf	19
Case III suction variations a=110 per	20
Case III, suction variations, q=110 psf Case IV, suction effect, q=10 psf	21
Case IV suction variation a=20 not	. 22
Case IV, suction variation, q=20 psf	23
Case IV, suction variation, q=50 psf	24
ouse 17, suction variation, q=110 ps1	25
Case VI suction variation, q=50 psf	26
Case VII, suction variation, q=50 psf.	27
Case VIII, suction variation, q=50 psf	28
Parametric Suction Effects, Flaps Deflected	
Case III, suction variation, $q=50$, $\delta_L=0$, $\delta_T=20$	29
Case VI, no suction, $q=50$, $\delta_T=30$, $\delta_{T}=20$	30
Case III, suction variation, $q=50$, $\delta_L=30$, $\delta_T=20$	31
Sideslip Angle Effects	
Case III, beta sweep, with suction, fixed alpha	32
Case III, beta sweep, no suction, fixed alpha	33
Case III, beta sweep, fixed Cq, fixed alpha	34
Case III, alpha sweep, with suction, fixed beta	35, 36
Case I, alpha sweep, no suction, fixed beta	37
Case III, alpha sweep, no suction, fixed beta	38
Case VI, alpha sweep, no suction, fixed beta	39

Transition Grit Effects	State of the state	
Case I, fuselage forebody grit variation, q=50 psf	40	

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Table 1.
Geometric Characteristics Of Model

The wing reference area is defined by extending the inboard leading edge and the outboard trailing edge of the cruise configuration planform projection to the centerline (see Figure 1.).

Aspect ratio	1.838
Reference area, ft ²	9.293
Gross area, ft ²	10.210
Span, ft	4.133
Root chord, ft	5.492
Tip chord, ft	0.529
Reference mean aerodynamic chord, ft	2.937
Leading-edge sweep:	
At body station 1.738 ft	73.02
At body station 6.651 ft	60.0

Table 2. Index to Data in Table 3.

Note: Alpha sweep-A is defined as $\alpha = -2^{\circ}$ through 20°, $\Delta = 2^{\circ}$. Alpha sweep-B is defined as $\alpha = -6^{\circ}$ through 20°, $\Delta = 2^{\circ}$. Beta sweep is defined as $\beta = 0^{\circ}$, $\pm 2^{\circ}$, $\pm 4^{\circ}$, $\pm 6^{\circ}$, $\pm 9^{\circ}$, $\pm 12^{\circ}$, $\pm 15^{\circ}$. Suction Surface is described as: left wing / right wing.

Run	Suction Surface (% open)	q (psf)	δ _{L, outboard} (deg)	δ_{Γ} (deg)	α (deg)	β (deg)	C _{q,avg}	
3	0/0	20	0	0	sweep-A	0	0	
4		50						
5		110		V	V	V	<u> </u>	
6	0/0	20	0	0	sweep-A	0	0	
7		50						
8	+ +	110	+	+	+	+	+	
9	100/0	20	0	0	sweep-A	0	.029658	
10		50					.018252	
11		110	1	V	T	+	.011583	
12	100 / 100	20	0	0	sweep-A	0	.012492	
13		50						
14		110		—		+	.004885	
15	50 / 50	20	0	0	sweep-A	0	.022883	
16		50					.012855	
17	+ + +	110		—		+	.008694	
18	33/33	20	0	0	sweep-A	0	.032882	
19	1 2 / 22	50	 			T	.020178	
20	+	110	+ + +	-		+	.012896	
24	33/33	20	0	0	sweep-A	0	.032520	
25	33,33	- 		T			.014437	
26			+			+	.008071	

Run	Suction Surface (% open)	q (psf)	$\delta_{L, \text{ outboard}} $ (deg)	δ _T (deg)	α (deg)	β (deg)	C _{q,avg}
27	33 / 33	20	0	0	sweep-A	0	0
28							.025158
29		V					.020556
30	T	10			+6° to +20°	+	.045499
31	33 / 33	50	0	0	sweep-A	0	.019722
32	33 / 33	50	0	0	sweep-A	0	.015974
33							.012832
34							.008600
35	V	*		+			.004188
36	33 / 33	110	0	0	sweep-A	0	.012446
37							.010891
38	-						.008605
39							.005599
40	₩		V	V	V	\	.003084
42	50 / 50	20	0	0	sweep-A	0	.021779
43							.017097
44							.014720
45							.009859
46	V	†	•	+		*	.004425
47	50 / 50	50	0	0	sweep-A	0	.002720
48				ŀ			.006068
49							.008539
50							.010937
51	+	•	V	+	•	V	.013424
52	50 / 50	110	0	0	sweep-A	0	.008407
53					+		.007147
54	_ 🛊	₩	+	+	-2° to 5.5°	+	.006117

Run	Suction Surface (% open)	q (psf)	δ _{L, outboard} (deg)	δ_{T} (deg)	α (deg)	β (deg)	C _{q,avg}	
57	50 / 50	110	0	0	sweep-A	0	.002092	
58	0	20	0	0	sweep-B	0	0	
59		50					0	
60		110		*	•	\	0	
63	50/50	20	0	0	sweep-A	0	.023651	
64	50 / 50	50	0	0	sweep-A	0	.014541	
65	1	110	T	₩	+	*	.009231	
66	50 / 50	20	0	0	sweep-A	0	0	
67		50					0	
68	 	110		-		*	0	
69	50 / 50	50	0	0	sweep-A	5	.013381	
70	1	-	1	+	1	+	.013317	
71	50 / 50	50	0	0	4	sweep	.013539	
72	30730			I	8		.013229	
73			+		12		.013138	
74	50 / 50	50	0	0	sweep-A	5	0	
75	1			Ţ	1	-5	0	
76	50 / 50	50	0	0	4	sweep	0	
77	30730				8		0	
78	1				12		0	
79	50 / 50	50	0	0	sweep-A	5	.005933	
80	1 30730	1	+	1	1	-5	.005913	
81	50 / 50	50	0	0	4	sweep	.006008	
82	30730		1		8		.005903	
84		- -	 		12	+ + -	.005486	
	100 / 100	20	0	0	sweep-A	0	.012284	
85 86	100/100	1	<u> </u>	<u> </u>	+ 1	1	.008395	

Run	Suction Surface (% open)	• q (psf)	δ _{L, outboard} (deg)	δ _T (deg)	α (deg)	β (deg)	C _{q,avg}
87	100 /100	20	0	0	sweep-A	0	.007129
88							.004901
89							.002493
90		+					0
91	100 / 100	50	0	0	sweep-A	0	.007752
92	100 / 100	50	0	0	sweep-A	0	.005661
93							.004425
94							.003103
95	1	V		+			.001678
96	100 / 100	110	0	0	sweep-A	0	.004693
97							.003637
98							.003100
99							.001895
100	•	-					.001099
118	67 / 67	50	0	0	sweep-A	0	.002132
119							.004664
120							.006715
121							.008118
122	↓	*					.011054
124	17 / 17	50	0	0	sweep-A	0	.030173
125							.026182
126							.017392
127		•	•	+		+	.008627
129	50 _i /50 _i ①	50	0	0	sweep-A	0	.013578
130							.011436
131							.009523
132		 	-		-	-	.006039

	Suction		T				
Run	Surface (% open)	q (psf)	δ _{L, outboard} (deg)	$\begin{array}{c} \delta_T \\ (\text{deg}) \end{array}$	α (deg)	β (deg)	C _{q,avg}
133	50 _i / 50 _i ①	50	.0	0	sweep-A	0	.003209
140	50 _o /50 _o 2	50	0	0	sweep-A	0	.013294
141	1.						.010665
142							.009010
143	 	V	+	*	V	V	.005730
144	50 _o /50 _o	50	0	0	sweep-A	0	.003144
150	50 / 50	50	30	20	sweep-A	0	.012429
151					+		.010636
152					sweep-B		.008947
153							.006044
154		+	V	•	V	V	.003125
157	0/0	50	30	20	sweep-B	0	0
160	0/0	50	0	20	sweep-B	0	0
161						5	0
162	+	+		+	V	-5	0
164	50 / 50	50	0	20	sweep-A	0	.012304
165							0
166							.010657
167							.008797
168							.005929
169	V	 		+	V	*	.003019
170	50 / 50	50	0	20	sweep-A	+5	.012799
171	+	 	V	\rightarrow	₩	-5	.012661
172	50 / 50	50	30	20	sweep-B	0	.012898
173						5	.012989
174						-5	0
175		+	+	+		-5	.012772

Run	Suction Surface (% open)	q (psf)	δ _{L, outboard} (deg)	$\delta_{ m T}$ (deg)	α (deg)	β (deg)	C _{q,avg}
176	50 / 50	50	30	20	sweep-B	0	0
177	50 / 50	50	30	20	sweep-B	5	0
178	0/0	50	30	20	sweep-B	0	0
179	+	V	V	+	+	5	0
180	0/0	50	- 30	20	sweep-B	-5	0
181	100 / 100	50	30	20	sweep-B	0	0
182						5	0
183	1	*	*	•	+	-5	0
184	100 / 100	50	0	0	sweep-B	0	0
185						5	0
186	+	*	V	+	•	-5	0
187	0/0	50	0	0	sweep-A	0	0
188						5	0
189		+	•	*		-5	0
190 ③	100 / 100	50	0	0	sweep-A	0	0
191 ④	+	♦	\	+	+	 	\psi

- ① Run 129 is with the inboard semi-span of the suction surface open (i.e. Case VII in Figure 5)
- 2 Run 140 is with the outboard semi-span of the suction surface open (i.e. Case VIII in Figure 5)
- 3 Run 190 is with nose transition grit removed.
- Run 191 is with a nose ring transition strip 0.25 inches wide, located 1.0 inches aft of the tip, and lateral strips from the nose ring to the wing apex region located 45° up from the lower surface centerline.

Table 3 Tabulated Force and Moment Data

Run	Point	R	M	q	α	β	C _N .	C _A	$\mathbf{c}_{\mathtt{L}}$	$\mathbf{C}_{\mathtt{D}}$	C _m	C _l	C _n	C _Y	Cq
3.	3.	2.45	0.12	20.13	-2.04	0.00	0.0490	0.0175	0.0496	0.0157	0.0151	0.0002	0.0002	0.0015	0.000000
3.	4.	2.45	0.12		0.05	0.00	0.1136	0.0184	0.1136	0.0185	0.0181	0.0000	0.0002	0.0006	0.000000
3.	5.	2.45	0.12	20.01	2.01	0.00	0.1799	0.0178	0.1791	0.0241	0.0213	0.0000	0.0000	0.0000	0.000000
3.	6.	2.44	0.12	19.90	3.08	0.00	0.2254	0.0172	0.2241	0.0293	0.0236	0.0003	0.0000	-0.0016	0.000000
3.	7.	2.44	0.12	20.02	4.07	0.00	0.2587	0.0172	0.2568	0.0356	0.0253	0.0003	0.0000	-0.0033	0.000000
3.	8.	2.44	0.12	19.90	4.53	0.00	0.2806	0.0176	0.2783	0.0397	0.0271	0.0007	0.0000	-0.0041	0.000000
3.	9.	2.44	0.12	20.02	5.02	0.00	0.3032	0.0183	0.3004	0.0447	0.0289	0.0009	-0.0001	-0.0045	0.000000
3.	10.	2.44	0.12	20.02	5.52	0.00	0.3271	0.0197	0.3237	0.0511	0.0333	0.0002	-0.0005	-0.0023	0.000000
3.	11.	2.44	0.12	19.90	6.06	0.00	0.3481	0.0205	0.3440	0.0571	0.0389	0.0011	-0.0009	-0.0037	0.000000
3.	12.	2.43	0.12	19.91	7.03	0.00	0.3931	0.0231	0.3873	0.0710	0.0491	0.0007	-0.0008	-0.0049	0.000000
3.	13.	2.44	0.12	19.91	8.01	0.00	0.4367	0.0245	0.4290	0.0851	0.0574	0.0014	-0.0013	-0.0064	0.000000
3.	14.	2.43	0.12	19.80	10.01	0.00	0.5313	0.0272	0.5185	0.1192	0.0759	0.0011	-0.0018	-0.0076	0.000000
3.	15.	2.44	0.12	20.04	12.03	0.00	0.6251	0.0294	0.6052	0.1591	0.0947	0.0019	-0.0032	-0.0102	0.000000
3.	16.	2.43	0.12	19.82	16.02	0.00	0.8363	0.0357	0.7940	0.2651	0.1422	0.0076	-0.0086	-0.0205	0.000000
3.	17.	2.42	0.11	19.73	20.05	0.00	1.0520	0.0417	0.9739	0.3999	0.1991	0.0113	-0.0218	-0.0452	0.000000
4.	1.	3.84	0.18	50.15	-2.02	0.00	0.0496	0.0157	0.0501	0.0139	0.0153	0.0000	0.0002	-0.0006	0.000000
4.	2.	3.84	0.18	50.15	-0.06	0.00	0.1107	0.0159	0.1107	0.0157	0.0182	-0.0001	0.0000	-0.0005	0.000000
4.	3.	3.83	0.18	49.92	2.06	0.00	0.1815	0.0152	0.1809	0.0217	0.0214	-0.0001	0.0000	-0.0006	0.000000
4.	4.	3.83	0.18	50.04	3.00	0.00	0.2163	0.0147	0.2152	0.0260	0.0232	0.0001	0.0001	-0.0013	0.000000
4.	5.	3.82	0.18	49.81	4.05	0.00	0.2582	0.0143	0.2566	0.0325	0.0256	0.0006	0.0001	-0.0031	0.000000
4.	6. 7	3.83	0.18	50.15	4.54	0.00	0.2786	0.0144	0.2765	0.0364	0.0272	0.0007	0.0002	-0.0039	0.000000
4. 4.	7. 8.	3.83	0.18	50.16	5.10	0.00	0.3074	0.0157	0.3048	0.0429	0.0295	0.0007	0.0000	-0.0036	0.000000
4. 4.	9.	3.83 3.83	0.18 0.18	50.05 50.16	5.55 6.06	0.00 0.00	0.3296 0.3482	0.0172	0.3264	0.0489	0.0333	0.0001	-0.0004	-0.0016	0.000000
4.	10.	3.83	0.18	50.10	7.05	0.00	0.3921	0.0177 0.0193	0.3443 0.3867	0.0543	0.0385	0.0010	-0.0007	-0.0017	0.000000
4.	11.	3.83	0.18	50.17	8.06	0.00	0.3921	0.0193	0.4301	0.0672 0.0817	0.0463 0.0558	0.0011 0.0012	-0.0007 -0.0011	-0.0033 -0.0041	0.000000
4.	12.	3.83	0.18	50.19	10.08	0.00	0.5345	0.0245	0.5220	0.1177	0.0338	0.0012	-0.0011	-0.0041	0.000000
4.	13.	3.83	0.18	50.21	12.02	0.00	0.6315	0.0276	0.6119	0.1585	0.0763	0.0013	-0.0019	-0.0049	0.000000
4.	14.	3.82	0.18	50.02	16.08	0.00	0.8442	0.0351	0.8015	0.2675	0.1456	0.0023	-0.0098	-0.0163	0.000000
4.	15.	3.80	0.18	49.51	20.01	0.00	1.0627	0.0434	0.9837	0.4045	0.1993	0.0096	-0.0142	-0.0231	0.000000
•••		2				0.00	1.0027	0.0154	0.7057	0.4045	0.1773	0.0030	-0.0142	-0.0251	0.000000
5.	1.	5.58	0.28	110.07	-2.01	0.00	0.0485	0.0148	0.0490	0.0131	0.0151	0.0002	0.0001	-0.0001	0.000000
5.	2.	5.57	0.28	110.07	0.00	0.00	0.1124	0.0154	0.1124	0.0154	0.0184	-0.0001	0.0000	-0.0002	0.000000
5.	3.	5.57	0.28	110.31	2.08	0.00	0.1817	0.0148	0.1810	0.0214	0.0216	-0.0001	0.0000	0.0001	0.000000
5.	4.	5.56	0.28	110.31	3.08	0.00	0.2186	0.0142	0.2175	0.0260	0.0237	0.0001	0.0001	-0.0005	0.000000
5.	5.	5.55	0.28	110.20	4.01	0.00	0.2557	0.0138	0.2542	0.0317	0.0259	0.0007	0.0002	-0.0018	0.000000
5.	6.	5.54	0.28	110.20	4.54	0.00	0.2783	0.0142	0.2764	0.0361	0.0276	0.0007	0.0002	-0.0026	0.000000
5.	7.	5.53	0.28	110.10	5.07	0.00	0.3030	0.0152	0.3005	0.0419	0.0300	0.0009	0.0000	-0.0026	0.000000
5.	8.	5.52	0.28	110.10	5.50	0.00	0.3250	0.0164	0.3219	0.0475	0.0330	0.0009	-0.0003	-0.0014	0.000000
5.	9.	5.51	0.28	109.99	6.03	0.00	0.3449	0.0173	0.3412	0.0534	0.0385	0.0014	-0.0008	-0.0006	0.000000
5.	10.	5.51	0.28	110.01	7.06	0.00	0.3883	0.0189	0.3831	0.0664	0.0469	0.0019	-0.0009	-0.0020	0.000000
5.	11.	5.49	0.28	109.56	8.02	0.00	0.4357	0.0206	0.4285	0.0811	0.0558	0.0015	-0.0011	-0.0028	0.000000
5 .	12.	5.50	0.28	110.29	10.05	0.00	0.5294	0.0247	0.5170	0.1167	0.0761	0.0012	-0.0017	-0.0026	0.000000
5.	13.	5.49	0.28	110.21	12.02	0.00	0.6280	0.0282	0.6083	0.1584	0.0955	0.0021	-0.0038	-0.0069	0.000000
5.	14.	5.47	0.27	109.51	16.06	0.00	0.8353	0.0365	0.7926	0.2661	0.1471	0.0068	-0.0092	-0.0146	0.000000
5.	15.	5.47	0.28	110.11	20.03	0.00	1.0557	0.0453	0.9763	0.4042	0.2010	0.0103	-0.0239	-0.0434	0.000000
6.	2.	2.47	0.12	20.24	-2.02	0.00	0.0506	0.0162	0.0511	0.0144	0.0145	0.0001	0.0000	-0.0009	0.000000
6.	3.	2.47	0.12	20.24	0.04	0.00	0.1161	0.0170	0.1161	0.0171	0.0175	0.0000	-0.0002	-0.0019	0.000000
6.	4.	2.46	0.12	20.13	2.04	0.00	0.1825	0.0162	0.1818	0.0227	0.0206	-0.0002	-0.0002	-0.0028	0.000000
6.	5.	2.47	0.12	20.24	3.01	0.00	0.2158	0.0159	0.2146	0.0272	0.0220	-0.0002	-0.0003	-0.0040	0.000000
6.	6.	2.46	0.12	20.13	4.04	0.00	0.2586	0.0156	0.2569	0.0338	0.0245	0.0002	-0.0002	-0.0064	0.000000
6.	7.	2.47	0.12	20.25	4.55	0.00	0.2834	0.0159	0.2813	0.0383	0.0257	0.0003	-0.0001	-0.0078	0.000000
6.	8.	2.47	0.12	20.25	5.08	0.00	0.3068	0.0169	0.3041	0.0440	0.0278	0.0009	-0.0004	-0.0061	0.000000
6.	9.	2.46	0.12	20.13	5.55	0.00	0.3279	0.0181	0.3246	0.0497	0.0331	0.0005	-0.0009	-0.0039	0.000000
6.	10.	2.46	0.12	20.13	6.06	0.00	0.3468	0.0188	0.3429	0.0553	0.0376	0.0010	-0.0012	-0.0050	0.000000
6.	11.	2.46	0.12	20.14	7.02	0.00	0.3941	0.0216	0.3885	0.0696	0.0478	0.0008	-0.0010	-0.0068	0.000000
6.	12.	2.46	0.12	20.14	8.03	0.00	0.4400	0.0231	0.4324	0.0843	0.0569	0.0012	-0.0015	-0.0081	0.000000
6.	13.	2.46	0.12	20.03	10.01	0.00	0.5337	0.0256	0.5211	0.1180	0.0746	0.0009	-0.0021	-0.0093	0.000000
6.	14.	2.46	0.12	20.04	12.07	0.00	0.6379	0.0287	0.6178	0.1615	0.0954	0.0021	-0.0035	-0.0126	0.000000
6.	15.	2.46	0.12	20.05	16.04	0.00	0.8409	0.0346	0.7986	0.2656	0.1408	0.0075	-0.0087	-0.0217	0.000000
6.	16.	244	0.11	19.73	20.06	0.00	1.0669	0.0411	0.9881	0.4045	0.1992	0.0121	-0.0223	-0.0 469	0.000000
7.	1.	3.87	0.18	50.15	-2.10	0.00	0.0457	0.0142	0.0462	0.0125	0.0146	0.0003	-0.0001	-0.0002	0.000000

					NAS	A Langiey	Kesemi	II CCIECE	, -	-			_	_	C	C
		_	1.7			α	В	C _N	C _A	C_L	c_{D}	C _m	G	C ³	CY	$C_{\mathbf{q}}$
Run	Point	R	M		q '	u.	-si.	- N	•	_		±35	ej L			
														0.0002	-0.0002	0.000000
_	_		0.1		50.15	0.07	0.00	0.1122	0.0145	****	0.0146	•••	0.000		•	0.000000
7.	2.	3.87	0.1	-							0.0203		•.••			0.000000
7.	3.	3.86	0.1					0.2190			0.0248		0.000	0.000		0.000000
7 .	4.	3.87	0.1		50.15		0.00	0.2570	0.0126		0.0308	0.0252		••••	0,000	0.000000
7.	5.	3.86 3.86	0.1		49.92		0.00	0.2789	0.0129	0.2770	0.0349	0.0269	0.0007 0.0005	•		0.000000
7.	6.	3.85	0.1		49.93	5.04	0.00	0.3039	0.0136		0.0402	0.0285				0.000000
7.	7. 8.	3.86	0.1		50.04	5.56	0.00	0.3271	0.0149	0.3241	0.0465	0.0326		-0.0009		0.000000
7. 7.	9.	3.86	0.1		50.05	6.03	0.00	0.3446	0.0156	0.3411	0.0517	0.0379	•	-0.0010		0.000000
7. 7.	10.	3.86	0.1		50.17	7.08	0.00	0.3901	0.0173	0.3850	0.0653	0.0466		-0.0013		0.000000
7. 7.	11.	3.86	0.1		50.29	8.03	0.00	0.4379	0.0189	0.4310	0.0799	0.0354	0	-0.0019	-0.0057	0.000000
7. 7.	12.	3.86	0.1		50.19	10.01	0.00	0,5306	0.0225	0.5187	0.1143	0.0949	0.0023	-0.0038	-0.0091	0.000000
7.	13.	3.85	0.1		50.09	12.01	0.00	0.6320	0.0256	0.6128	0.1566 0.2639	0.1444	0.0078	-0.0096	-0.0168	0.000000
7.	14.	3.85	0.		50.02	16.02	0.00	0.8429	0.0327	0.8011	0.4031	0.1971	0.0057	-0.0093	-0.0168	0.000000
7.	15.	3.84	0.	18	49.74	20.01	0.00	1.0661	0.0408	0.9878	0.4031	0.17.1	••••			
•	201									0.0452	0.0111	0.0148	0.0002	0.0000	-0.0001	0.000000
8.	1.	5.64	0.	28	110.07	-2.09	0.00	0.0447	0.0127	0.0432	0.0111	0.0180	-0.0001	-0.0001	0.0000	0.000000
8.	2.	5.60	0.	27	109.26	-0.01	0.00	0.1085	0.0133	0.1085	0.0190	0.0213	-0.0001	-0.0001	0.0000	0.000000
8.	3.	5.59	0.	.27	109.04	2.01	0.00	0.1782	0.0127	0.2157	0.0236	0.0234	0.0001	0.0000	-0.0011	0.000000
8.	4.	5.60	0.		109.85	3.04	0.00	0.2167	0.0121 0.0117	0.2551	0.0299	0.0256	0.0007	0.0001	-0.0027	0.000000
8.	5.	5.60	0.		109.97	4.06	0.00	0.2566	0.0117	0.2722	0.0332	0.0270	0.0009	0.0003	-0.0035	0.000000
8.	6.	5.59	0.		110.09	4.50	0.00	0.2740 0.3027	0.0117	0.3004	0.0395	0.0292	0.0007	0.0001	-0.0036	0.000000
8.	7.	5.59			110.44	5.08	0.00	0.3027	0.0128	0.3201	0.0447	0.0322	0.0010	-0.0003	-0.0026	0.000000
8.	8.	5.58			110.10	5.51	0.00	0.3446	0.0138	0.3411	0.0512	0.0378	0.0014	-0.0009	-0.0011	0.000000
8.	9.	5.58			110.10	6.07	0.00 0.00	0.3859	0.0163	0.3810	0.0635	0.0464	0.0019	-0.0010	-0.0022	0.000000
8.	10.	5.57			110.35	7.04	0.00	0.3853	0.0181	0.4292	0.0791	0.0551	0.0012	-0.0012	-0.0033	0.000000
8.		5.5			110.36	8.06	0.00	0.5285	0.0221	0.5166	0.1138	0.0756	0.0009	-0.0018	-0.0031	0.000000
8.		5.5			110.40	10.03 12.11	0.00	0.6322	0.0256	0.6127	0.1577	0.0961	0.0021	-0.0040	-0.0073	0.000000
8		5.5	-		110.44	16.08	0.00	0.8370	0.0333	0.7950	0.2638	0.1461	0.0067	-0.0095	-0.0152	0.000000
8		5.5			110.08	20.03	0.00	1.0534	0.0417	0.9753	0.4001	0.1997	0.0106	-0.0230	-0.0390	0.00000
8	. 15.	5.5	4 ().28	110.11	20.03	0.00								0.0003	0.029645
	_		_ /		20.13	-2.07	0.00	0.0479	0.0088	0.0482	0.0071	0.0141	0.0002	-0.0003	-0.0003	0.029846
9		2.4		0.12 0.12	20.13	0.06	0.00	0.1143	0.0092	0.1143	0.0093	0.0169	0.0001	-0.0004 -0.0004	-0.0020	0.029890
9				0.12	20.02	2.04	0.00	0.1828	0.0084	0.1824		0.0196	0.0002	-0.0005	-0.0032	0.029817
9	_			0.12	20.13	3.02	0.00	0.2183	0.0078	0.2176		0.0211	0.0003	-0.0004	-0.0059	0.029812
). 5.). 6.			0.12	20.02	3.99	0.00	0.2578	0.0078	0.2566		0.0228	0.0003	-0.0002	-0.0083	0.029794
				0.12	20.02	4.52	0.00	0.2827	0.0080	0.2812		0.0241	0.0011	0.0000	-0.0101	0.029699
	9. 7. 9. 8			0.12	20.13	5.09	0.00	0.3060	0.0078	0.3041		0.0255 0.0272	0.0013	-0.0002	-0.0119	0.029656
	9. 9			0.12	20.13	5.51	0.00	0.3218	0.0074	0.3196		0.0272	0.0024	-0.0003	-0.0146	0.029593
	9. 10			0.12	20.25	6.08	0.00	0.3410	0.0074	0.3383		0.0373	0.0040	-0.0004	-0.0220	
	9. 11	_		0.12	20.14	7.03	0.00	0.3823	0.0080	0.3784			0.0046	-0.0007	-0.0265	0.029418
	9. 12			0.12	20.25	8.01	0.00	0.4214		0.4162				-0.0021	-0.0355	0.029279
	9. 13			0.12	20.14	10.01	0.00	0.5092	0.0070	0.5003		.:		-0.0062		
	9. 14	_		0.12	20.15	12.02	0.00	0.6105	0.0133	0.5943				-0.0092	-0.0227	
	9. 15			0.12	19.94	16.04	0.00	0.8463	0.0271							0.029699
	9. 16	5. 2.	45	0.12	19.85	20.02	0.00	1.0617	0.0330	0.760.	2 0.55 12			3		
								A 649A	0.0115	0.048	4 0.0098	0.0146	0.0003			
1	0.		87	0.18	50.03	-2.03	0.00	0.0480 0.1115					-0.0001			
1	0.	2. 3.	.87	0.18	50.26	-0.01	0.00	0.1113								
1	l o. 3	-	.88	0.18	50.38	2.08	0.00 0.00									
1	lO.		.87	0.18	50.27	3.10	0.00									
:	10.		.87	0.18	50.38	4.06						0.0252	0.0013			3 0.018428
:			.87	0.18		4.50 5.08	0.00					2 0.0262				
	10.		.87	0.18			0.00		T 12	_	9 0.040	2 0.028				
			.87	0.18		5.55	0.00									
			.86	0.18		6.06 7.10	0.00		-							
		_	.87	0.18		8.04	0.00		- ,		55 0.068					
			3.87	0.18		10.03	0.00									
			3.87	0.18			0.00				60 0.164					
			3.87	0.18			0.00		-							
			3.86	0.18			0.00	_			77 0.401	3 0.198	6 0.009	4 -0.014	-0.02	
	10.	15.	3.84	0.18	49.02	, 20.00									0.000	0.012133
		_	676	0.25	8 110.19	-2.08	0.0	0.047	5 0.012							
	11.	_	5.76 5.72							2 0.11	43 0.013	33 0.018	31 -0.000	,, -U.UU	J. U. U.	
	11.	3.	J.12	U.Z.												

						ואטאו	Langicy	Kesearch (Center 14	⊢ by 22-I	Foot Subsc	onic Tunnel	Test 39	1		
R	un F	oint	R	M	f q	α	β	C _N	C _A	C_1	L C	C _D C _m	, C	ı C _n	C _Y	C _q
					_										•	4
	11. 1.	4. 5.	5.72 5.73								825 0.01	90 0.02	10 0.00	00.00	02 -0.00	03 0.012026
	1.	6.	5.71	0.2												
1	1.	7.	5.71	0.2												•
	1.	8.	5.69	0.2	8 110.0											53 0.011673
	l.	9.	5.69	0.2												(A)
		l0. .1.	5.68 5.67	0.2												
1			5.67	0.28					_							
1			5.66	0.28										2 -0.001		
11			5.65	0.28		–	0.0									
11			5.63	0.28			0.00									
11	. 10	6.	5.63	0.27	109.88	20.07	0.00	1.056								
12	<u>.</u> :	2. :	2.51	0.12	20.13	201							0.010	1 -0.023	0 -0.038	7 0.010944
12			2.51	0.12			0.00		*******					2 -0.0013	3 0.002	7 0.012321
12	. 4		2.50	0.12			0.00							-0.0014	4 0.001	
12			2.51	0.12	20.13	3.08	0.00								_	
12			251	0.12	20.13	4.06	0.00	0.2643								
12 12			2.50 2.51	0.12 0.12	20.02	4.50	0.00									
12.			251	0.12	20.13 20.13	5.04 5.54	0.00	0.2953		0.293						
12.			.51	0.12	20.25	6.01	0.00	0.3141 0.3319		0.311						
12.	11			0.12	20.14	7.05	0.00	0.3677	0.0099	0.329 0.364						0.012465
12.	12			0.12	20.25	8.02	0.00	0.4016	0.0055	0.396						
12. 12.	13. 14.	_		0.12	20.14	10.06	0.00	0.5008	0.0093	0.491				-0.0026 -0.0018		
12	15.	_		0.12 0.12	20.15 20.06	12.09 16.09	0.00	0.6253	0.0221	0.606			-0.0009	-0.0024	-0.0228	
12.	16.			0.11	19.73	20.04	0.00	0.8397 1.0582	0.0317	0.7980			0.0056	-0.0092	-0.0169	0.012494
						20.04	0.00	1.0382	0.0384	0.9810	0.3986	0.1978	0.0097	-0.0223	-0.0425	0.012567
13.	1.			0.18	50.03	-2.06	0.00	0.0461	0.0140	0.0466	0.0123	0.0149	0.0001			
13. 13.	2. 3.			0.18	49.80	-0.08	0.00	0.1062	0.0143	0.1063		0.0149	0.0001 -0.0003	-0.0004 -0.0005	0.0011	0.007856
13.	3. 4.			0.18 0.18	50.27	2.01	0.00	0.1776	0.0132	0.1770		0.0204	-0.0004	-0.0005	0.0008 0.0010	0.007913 0.007801
13.	5.	3.9		0.18	50.27 50.27	3.09 4.06	0.00	0.2166	0.0122	0.2156		0.0215	-0.0003	-0.0006	0.0004	0.007501
13.	6.	3.9		0.18	50.15	4.53	0.00	0.2549 0.2723	0.010 8 0.0102	0.2535		0.0220	-0.0004	-0.0006	0.0002	0.007733
13.	7.	3.9		0.18	50.27	5.04	0.00	0.2929	0.0102	0.2707 0.2910	0.0316 0.0351	0.0226	-0.0001	-0.0007	0.0001	0.007661
13.	8.	3.9		0.18	50.16	5.50	0.00	0.3101	0.0087	0.3079	0.0384	0.0232 0.0237	-0.0001 -0.0003	-0.0008	-0.0002	0.007676
13. 13.	9. 10.	3.9 3.9).18	50.39	6.04	0.00	0.3322	0.0079	0.3296	0.0428	0.0246	-0.0005	-0.0009 -0.0010	-0.0004 -0.0006	0.007703
13.	11.	3.9).18).18	50.28 50.51	7.02	0.00	0.3670	0.0063	0.3635	0.0511	0.0282	-0.0005	-0.0010	-0.0008	0.007667 0.007617
13.	12.	3.9	-	.18	50.30	8.07 10.05	0.00 0.00	0.4152 0.5253	0.0060	0.4102	0.0642	0.0310	0.0003	-0.0013	-0.0029	0.007542
13.	13.	3.9		.18	50.09	12.02	0.00	0.6286	0.0154 0.0231	0.5146	0.1068	0.0575	0.0007	-0.0023	-0.0064	0.007519
13.	14.	3.8		.18	50.03	16.11	0.00	0.8463	0.0324	0.6100 0.8041	0.1535 0.2659	0.0890	0.0009	-0.0033	-0.0048	0.007668
13.	15.	3.8	7 0	.18	49.51	20.10	0.00	1.0656	0.0404	0.9869	0.4041	0.1442 0.2005	0.0064 0.0092	-0.0097	-0.0140	0.007652
14.	I.	5.7	Λ Λ	.28	110.20	2.24							0.0092	-0.0150	-0.0231	0.007585
14.	2.	5.6			110.30 110.07 =-	-2.04 -0.05	0.00	0.0465	0.0137	0.0470	0.0120	0.0146	0.0001	-0.0002	0.0005	0.005126
14.	3.	5.6			109.96	2.00	0.00 0.00	0.1084 0.1786	0.0141 0.0133	0.1084	0.0140	0.0176	-0.0002	-0.0003	0.0004	0.005171
14.	4.	5.66	6 O.	28	109.85	3.08	0.00	0.2198	0.0133	0.1780 0.2188	0.0196 0.0240	0.0203	-0.0003	-0.0002	0.0009	0.004998
14.	5.	5.64			109.62	4.01	0.00	0.2552	0.0112	0.2538	0.0240	0.0217 0.0225	-0.0004 -0.0001	-0.0004	0.0007	0.005049
14. 14.	6. 7.	5.66 5.65			110.32	4.56	0.00	0.2758	0.0104	0.2741	0.0323	0.0231	-0.0002	-0.0004 -0.0004	0.0006 0.0006	0.004813 0.004918
14.	8.	5.65			1 10.32 I 10.21	5.07 5.51	0.00	0.2955	0.0098	0.2935	0.0358	0.0242	0.0000	-0.0005		0.004918
14.	9.	5.64			10.44	6.08	0.00 0.00	0.3122 0.3371	0.0093	0.3098	0.0392	0.0247	-0.0002	-0.0006		0.004765
14.	10.	5.64			10.45	7.06	0.00	0.3371	0.00 89 0.0105	0.3343	0.0446	0.0256	-0.0003	-0.0007		0.004728
14.	11.	5.62		28 I	10.13	8.09	0.00	0.4343	0.0103	0.3 83 6 0.4279	0.0581 0.0757	0.0274		-0.0008		0.004796
14.	12.	5.63		-	10.63	10.05		0.5280		0.5161	0.0737	0.0434 0.0693		-0.0010 -0.0014		0.004790
14. 14.	13. 14.	5.62 5.59			10.56	12.05		0.6306		0.6113	0.1571	0.0925				0.004938
14.	14. 15.	5.59			09.40 09.65	16.01		0.8356		0.7936	0.2639	0.1447				0.004893 0.004810
			0.2	., 1	v7.W	20.06	0.00	1.0551	0.0439	0.9761	0.4030	0.2016				0.004683
15.	1.	2.50	0.1	2	20.25	-2.02	0.00	0.0470	0.0181	0.0474	0017-	0.0000				
15.	2.	2.49	0.1	2	20.13			0.1083			0.0164 0.0191					0.023139
· 15.	3.	2.48	0.1	2	20.02			_			0.0191					0.023206
										-				~~~18	0.0012).023150

Run	Point	R	M	q	α	β	C _N	C _A	$\mathbf{c}_{\mathtt{L}}$	C _D	C	G	C _n	C _Y	C _q
15	4	2.49	0.12	20.13	3.01	0.00	0.2157	0.0175	0.2145	0.0288	0.0210	-0.0004	-0.0018	0.0009	0.023152
15. 15.	4. 5.	2.49	0.12	20.13	4.02	0.00	0.2562	0.0168	0.2544	0.0347	0.0218	-0.0004	-0.0020	0.0002	0.022891
15.	6.	2.48	0.12	20.02	4.59	0.00	0.2785	0.0162	0.2763	0.0384	0.0225	-0.0003	-0.0020	-0.0012	0.022864
15.	7.	249	0.12	20.13	5.08	0.00	0.2974	0.0153	0.2948	0.0416	0.0230	0.0000	-0.0020	-0.0009	0.022968
15.	8.	2.48	0.12	20.02	5.51	0.00	0.3145	0.0145	0.3116	0.0447	0.0233	-0.0002	-0.0022	-0.0013 -0.0021	0.022926 0.022898
15.	9.	2.48	0.12	20.02 20.02	6.03 7.02	0.00	0.3358 0.3686	0.0137 0.0116	0.3325 0.3645	0.0489 0.0566	0.0240 0.0279	-0.0005 -0.0004	-0.0023 -0.0026	-0.0021	0.022787
15. 15.	10. 11.	2.48 2.48	0.12 0.12	20.02	8.02	0.00	0.3080	0.0099	0.3996	0.0663	0.0312	0.0003	-0.0029	-0.0042	0.022623
15.	12.	249	0.12	20.14	10.09	0.00	0.4964	0.0080	0.4874	0.0949	0.0353	0.0019	-0.0037	-0.00 69	0.022448
15.	13.	2.49	0.12	20.15	12.03	0.00	0.5970	0.0171	0.5803	0.1411	0.0682	0.0012	-0.0050	-0.0167	0.022507
15.	14.	2.48	0.12	20.05	16.00	0.00	0.8125	0.0227	0.7747	0.2458	0.1104	0.0020	-0.0094	-0.0216	0.022550
15.	15.	2.46	0.11	19.62	20.07	0.00	1.0626	0.0410	0.9840	0.4032	0.1970	0.0087	-0.0221	-0.0415	0.023134
16.	4.	3.99	0.18	50.49	-2.09	0.00	0.0474	0.0188	0.0480	0.0170	0.0141	0.0002	0.0000	-0.0002	0.000000
16.	5.	3.98	0.18	50.50	0.01	0.00	0.1112	0.0172	0.1112	0.0172	0.0175	-0.0002	-0.0007	-0.0001 -0.0001	0.014032 0.014144
16.	6. 7	3.97	0.18	50.27 50.38	2.01 3.01	0.00 0.00	0.1803 0.2196	0.0161 0.0151	0.1796 0.2185	0.0225 0.0266	0.0203 0.0216	-0.0002 -0.0002	-0.0007 -0.0007	-0.0001	0.014144
16. 16.	7. 8.	3.97 3.97	0.18 0.18	50.27	4.03	0.00	0.2638	0.0131	0.2622	0.0324	0.0217	0.0001	-0.0008	-0.0010	0.013819
16.	9.	3.97	0.18	50.39	4.52	0.00	0.2828	0.0130	0.2809	0.0352	0.0218	0.0004	-0.0008	-0.0012	0.013754
16.	10.	3.96	0.18	50.39	5.05	0.00	0.3080	0.0120	0.3057	0.0390	0.0224	0.0002	-0.0008	-0.0011	0.013807
16.	11.	3.96	0.18	50.39	5.51	0.00	0.3147	0.0112	0.3121	0.0413	0.0239	-0.0004	-0.0010	-0.0011	0.013874
16.	12.	3.96	0.18	50.50	6.00	0.00	0.3335	0.0103	0.3306	0.0451	0.0248	-0.0004	-0.0011 -0.0013	-0.0013 -0.0020	0.013745 0.013712
16.	13.	3.95 3.95	0.18 0.18	50.39 50.40	7.01 8.08	0.00	0.3697 0.4145	0.0086	0.3659	0.0536 0.0660	0.0287 0.0318	-0.0003 0.0000	-0.0015	-0.0026	0.013712
16. 16.	14. 15.	3.95 3.94	0.18	50.40	10.04	0.00	0.5185	0.0160	0.5078	0.1062	0.0553	0.0012	-0.0025	-0.0072	0.013428
16.	16.	3.95	0.19	50.66	12.05	0.00	0.6220	0.0195	0.6042	0.1489	0.0759	0.0023	-0.0047	-0.0122	0.013491
16.	17.	3.93	0.18	50.14	16.04	0.00	0.8432	0.0326	0.8014	0.2643	0.1390	0.0070	-0.0096	-0.0143	0.013816
16.	18.	3.94	0.18	50.55	20.00	0.00	1.0680	0.0418	0.9893	0.4046	0.1988	0.0088	-0.0146	-0.0235	0.013610
17.	1.	5.72	0.28	110.53	-2.05	0.00	0.0469	0.0144	0.0474	0.0127	0.0146	0.0001	-0.0003	-0.0001	0.009327
17.	2.	5.68	0.28	109.73	0.08	0.00	0.1132	0.0152	0.1132	0.0153	0.0178	-0.0002	-0.0004	-0.0001	0.009023
17.	3.	5.66	0.27	109.50	2.08	0.00	0.1821	0.0143	0.1815	0.0209	0.0205	-0.0003	-0.0003	0.0004	0.009084
17.	4.	5.67	0.28	110.08	3.09	0.00	0.2186	0.0135	0.2176	0.0252	0.0218	-0.0003 -0.0001	-0.0004 -0.0005	0.0004	0.008928
17. 17.	5. 6.	5.65 5.65	0.28 0.28	110.08 110.20	4.03 4.52	0.00 0.00	0.2556 0.2745	0.0123 0.0118	0.2541 0.2727	0.0302 0.0334	0.0228	-0.0001	-0.0005	0.0001	0.008561
17.	o. 7.	5.64	0.28	110.20	5.06	0.00	0.2743	0.0110	0.2939	0.0370	0.0242	0.0001	-0.0006	-0.0002	0.008805
17.	8.	5.63	0.28	110.09	5.54	0.00	0.3133	0.0104	0.3109	0.0406	0.0249	-0.0002	-0.0007	-0.0003	0.008654
17.	9.	5.63	0.28	110.21	6.04	0.00	0.3328	0.0097	0.3299	0.0446	0.0257	-0.0001	-0.0008	-0.0003	0.008622
17.	10.	5.61	0.28	110.11	7.04	0.00	0.3801	0.0096	0.3760	0.0561	0.0273	-0.0001	-0.0010	-0.0006	0.008309
17.	11.	5.61	0.28	110.24	8.04	0.00	0.4336	0.0130	0.4275	0.0735	0.0344	-0.0009	-0.0011 -0.0021	0.0008 -0.0032	0.008565 0.008497
17.	12.	5.61	0.28	110.74	10.06 12.09	0.00 0.00	0.5277 0.6311	0.0197 0.0267	0.5161 0.6115	0.1116 0.1583	0.0633 0.0915	0.0010 0.0011	-0.0021	-0.0054	0.008497
17. 17.	13. 14.	5.60 5.58	0.28 0.28	110.67 110.20	16.01	0.00	0.8329	0.0257	0.7907	0.2641	0.1449	0.0063	-0.0095	-0.0141	0.008503
17.	15.	5.57	0.28	110.11	20.03	0.00	1.0546	0.0449	0.9754	0.4035	0.2008	0.0101	-0.0235	-0.0402	0.008216
18.	2.	2.45	0.12	20.02	-2.04	0.00	0.0465	0.0174	0.0471	0.0158	0.0153	-0.0004	-0.0016	0.0039	0.033428
18.	3.	2.45	0.12	20.02	0.09	0.00	0.1095	0.0177	0.1095	0.0179	0.0183	-0.0006	-0.0018	0.0033	0.033408
18.	4.	2.45	0.12	20.13	2.02	0.00	0.1756	0.0166	0.1749	0.0228	0.0210	-0.0006	-0.0017	0.0024	0.033151
18,	5.	2.45	0.12	20.02	3.08	0.00	0.2139	0.0155	0.2127	0.0270	0.0222	-0.0007	-0.0019	0.0021	0.033217
18.	6.	2.45	0.12	20.13	4.05	0.00	0.2504	0.0145	0.2487	0.0321	0.0228	-0.0006	-0.0020 -0.0020	0.0008	0.032968
18.	7.	2.45	0.12	20.02	4.54	0.00	0.2679	0.0135 0.0127	0.2660 0.2817	0.0347 0.0376	0.0237 0.0240	-0.0004 -0.0003	-0.0020	0.000 8 0.0002	0.03 2986 0.03 2949
18.	8. 9.	2.45 2.45	0.12 0.12	20.13 20.14	5.04 5.50	0.00 0.00	0.2839 0.3026	0.0127	0.2017	0.0376	0.0245	-0.0003	-0.0022	-0.0001	0.032773
18. 18.	9. 10.	2.45	0.12	20.14	6.02	0.00	0.3020	0.0120	0.3214	0.0450	0.0250	-0.0005	-0.0022	0.0001	0.032712
18.	11.	2.45	0.12	20.14	7.07	0.00	0.3609	0.0094	0.3570	0.0537	0.0288	-0.0007	-0.0025	-0.0011	0.032616
18.	12.	2.44	0.12	20.02	7.99	0.00	0.3970	0.0076	0.3921	0.0627	0.0318	0.0001	-0.0030	-0.0022	0.032580
18.	13.	2.44	0.12	20.03	10.06	0.00	0.5003	0.0086	0.4911	0.0959	0.0380	0.0027	-0.0037	-0.0044	0.032407
18.	14.	2.44	0.12	20.04	12.06	0.00	0.5988	0.0160	0.5822		0.0710	0.0037 0.0012	-0.0055 -0.00 8 7	-0.0115 -0.0196	0.032470 0.032320
18.	15. 16	2.44 2.41	0.12 0.11	19.94 19. 5 0	16.00 20 .01	0.00	0.8008 1.0499	0.0204 0.0364	0.7642 0.9740	0.2404 0.3934	0.1107 0.1904	0.0012	-0.0208	-0.0196	0.032320
18.	16.	∠ +1	J.11	17.30	20.01	0.00	1.0477	U.UJU4	U.717U						
19.	1.	3.84	0.18	50.27	-2.07	0.00	0.0436	0.0145	0.0441	0.0130	0.0148	-0.0001	-0.0006	0.0012	0.020797
19.	2.	3.83	0.18	50.15	0.05	0.00	0.1089	0.0151	0.1089	0.0152	0.0178	-0.0003 -0.0004	-0.0007 -0.0007	0.0009	0.020781 0.020426
19. 19.	3. 4.	3.83 3.81	0.18 0.18	50.27 49.92	2.09 2.99	0.00	0.1792 0.2122	0.0142 0.0133	0.1786 0.2112	0.0207 0.0244	0.0208 0.0219	-0.0004	-0.0007	0.0009	0.020428
17.	4.	J.0 I	0.10	47.74	2.77	0.00	V-2122	0.0133	·	V.U2-TT	J.V217		5.0500		

Run	Point	R	M	q	α	β	C_N	C _A	C_{L}	C_D	C _m	q	C ₂	$\mathbf{C}_{\mathbf{Y}}$	C_q
19.	5.	3.83	0.18	50.27	4.07	0.00	0.2550	0.0121	0.2535	0.0301	0.0229	-0.0003	-0.0009	0.0006	0.020366
19.	6.	3.81	0.18	49.93	4.50	0.00	0.2707	0.0121	0.2689	0.0329	0.0235	-0.0003	-0.0009	0.0002	0.020308
19.	7.	3.81	0.18	49.93	5.06	0.00	0.2916	0.0110	0.2895	0.0367	0.0244	-0.0001	-0.0010	0.0001	0.020277
19.	8.	3.80	0.18	49.81	5.59	0.00	0.3139	0.0102	0.3114	0.0408	0.0249	-0.0003	-0.0011	0.0000	0.020212
19.	9.	3.81	0.18	50.16	6.05	0.00	0.3315	0.0096	0.3286	0.0445	0.0255	-0.0003	-0.0012	-0.0003	0.020040
19.	10.	3.81	0.18	50.16	7.04	0.00	0.3704	0.0082	0.3666	0.0535	0.0291	-0.0001	-0.0015	-0.0007	0.019900
19.	11.	3.80	0.18	50.05	8.02	0.00	0.4221	0.0090	0.4167	0.0678	0.0289	0.0002	-0.0017	-0.0020	0.019436
19.	12.	3.81	0.18	50.19	9.99	0.00	0.5114	0.0153	0.5010	0.1038	0.0555	0.0009	-0.0025	-0.0048	0.019803
19.	13.	3.79	0.18	49.97	12.07	0.00	0.6224	0.0192	0.6047	0.1489	0.0763	0.0042	-0.0050	-0.0101	0.019729
19. 19.	14. 15.	3.79 3.79	0.1 8 0.1 8	49.91 49.97	16.06 20.05	0.00 0.00	0.8355	0.0285	0.7950	0.2585	0.1288	0.0052	-0.0089	-0.0148	0.019898
45.	15.	3.79	0.10	47.71	20.03	0.00	1.0570	0.0406	0.9790	0.4006	0.1964	0.0086	-0.0149	-0.0222	0.020011
20.	1.	5.47	0.28	110.07	-2.06	0.00	0.0474	0.0141	0.0479	0.0124	0.0146	0.0001	-0.0003	0.0000	0.013642
20.	2.	5.44	0.27	109.04	0.02	0.00	0.1115	0.0148	0.1115	0.0149	0.0178	-0.0003	-0.0005	0.0000	0.013751
20.	3.	5.45	0.28	109.96	2.05	0.00	0.1818	0.0142	0.1812	0.0206	0.0204	-0.0004	-0.0004	0.0005	0.013523
20.	4.	5.42	0.28	110.20	3.00	0.00	0.2164	0.0133	0.2154	0.0246	0.0221	-0.0004	-0.0004	0.0008	0.013289
20.	5.	5.38	0.28	110.09	4.02	0.00	0.2559	0.0123	0.2544	0.0302	0.0232	-0.0002	-0.0005	0.0006	0.013104
20.	6.	5.38	0.28	110.09	4.49	0.00	0.2742	0.0118	0.2725	0.0332	0.0236	-0.0002	-0.0006	0.0003	0.012959
20.	7.	5.38	0.28	110.67	5.04	0.00	0.2946	0.0112	0.2925	0.0370	0.0245	-0.0003	-0.0006	0.0003	0.012910
20.	8.	5.36	0.28	110.21	5.55	0.00	0.3164	0.0107	0.3139	0.0413	0.0254	-0.0004	-0.0008	0.0001	0.012643
20.	9.	5.35	0.28	109.87	6.08	0.00	0.3383	0.0101	0.3353	0.0459	0.0261	-0.0004	-0.0009	0.0000	0.012599
20. 20.	10. 11.	5.35 5.34	0.28 0.28	110.80 110.47	7.04 8.03	0.00	0.3841 0.4354	0.0106 0.0134	0.3800	0.0575	0.0270	-0.0007	-0.0010	-0.0009	0.012292
20.	12.	5.33	0.28	110.47	10.03	0.00	0.5281	0.0134	0.4292 0.5166	0.0741 0.1115	0.0344 0.0622	-0.0007 0.0012	-0.0012 -0.0023	-0.000 8 -0.003 8	0.012367 0.012446
20.	13.	5.34	0.28	110.44	12.03	0.00	0.6259	0.0246	0.6070	0.1546	0.0870	0.0012	-0.0023	-0.0057	0.012448
20.	14.	5.32	0.28	109.98	16.08	0.00	0.8361	0.0363	0.7933	0.2665	0.1469	0.0056	-0.0097	-0.0140	0.012808
20.	15.	5.32	0.28	109.77	20.04	0.00	1.0543	0.0455	0.9749	0.4040	0.2016	0.0102	-0.0219	-0.0348	0.012548
24.	2.	2.49	0.12	20.02	-2.02	0.00	0.0407	0.0180	0.0413	0.0166	0.0152	0.0009	-0.0024	0.0041	0.032574
24.	3.	249	0.12	20.13	0.00	0.00	0.1031	0.0182	0.1031	0.0182	0.0183	0.0008	-0.0025	0.0028	0.032877
24.	4.	2.49	0.12	20.02	2.00	0.00	0.1709	0.0173	0.1702	0.0233	0.0210	0.0006	-0.0025	0.0031	0.032929
24.	5.	2.49	0.12	20.13	3.04	0.00	0.2065	0.0163	0.2053	0.0272	0.0220	0.0002	-0.0025	0.0027	0.032811
24. 24.	6. 7.	2.49 2.49	0.12 0.12	20.13	4.09	0.00	0.2493	0.0152	0.2476	0.0329	0.0228	0.0004	-0.0028	0.0020	0.032678
24. 24.	7. 8.	2.49	0.12	20.13 20.14	4.51 5.03	0.00 0.00	0.2644 0.2839	0.0146	0.2624	0.0353	0.0234	0.0007	-0.0028	0.0017	0.032663
24.	9.	2.49	0.12	20.14	5.59	0.00	0.3065	0.0137 0.0131	0.2816	0.0386	0.0242	0.0011	-0.0029 -0.0030	0.0016	0.032671 0.032611
24.	10.	2.49	0.12	20.02	6.07	0.00	0.3264	0.0125	0.3232	0.0470	0.0248	0.0008	-0.0031	0.0014	0.032510
24.	11.	2.49	0.12	20.02	7.08	0.00	0.3647	0.0108	0.3606	0.0556	0.0288	0.0006	-0.0035	-0.0001	0.032437
24.	12.	2.49	0.12	20.02	8.04	0.00	0.3899	0.0095	0.3848	0.0639	0.0319	-0.0003	-0.0031	0.0004	0.032332
24.	13.	2.50	0.12	20.14	10.01	0.00	0.4893	0.0103	0.4801	0.0952	0.0371	0.0023	-0.0039	-0.0011	0.032032
24.	14.	2.49	0.12	20.15	11.96	0.00	0.5838	0.0176	0.5675	0.1382	0.0708	0.0028	-0.0058	-0.0099	0.032112
24.	15.	2.49	0.12	20.05	16.09	0.00	0.7966	0.0222	0.7592	0.2421	0.1137	0.0021	-0.0101	-0.0192	0.031839
24.	16.	2.46	0.11	19.62	20.03	0.00	1.0438	0.0374	0.9678	0.3927	0.1902	0.0048	-0.0218	-0.0339	0.032733
25		- 45													
25. 25	1.	2.49	0.12	20.13	-2.01	0.00	0.0322	0.0164	0.0328	0.0153	0.0146	-0.0006	0.0000	0.0052	0.014623
25. 25.	2. 3.	2.49 2.49	0.12 0.12	20.01 20.01	-0.03 2.04	0.00	0.0923 0.1619	0.0170	0.0923	0.0169	0.0175	-0.0008	-0.0001	0.0047	0.014582
25. 25.	3. 4.	2.49	0.12	20.01	3.06	0.00 0.00	0.1980	0.0160 0.0151	0.1612 0.1969	0.0218 0.0257	0.0201	-0.0010 -0.0011	-0.0001	0.0044	0.014554
25.	5 .	2.49	0.12	20.02	4.08	0.00	0.2383	0.0131	0.1367	0.0237	0.0212	-0.0011	-0.0003 -0.0004	0.0040	0.014398 0.014416
25.	6.	2.49	0.12	20.02	4.53	0.00	0.2548	0.0135	0.2529	0.0335	0.0224	-0.0009	-0.0004	0.0032	0.014443
25.	7.	2.49	0.12	20.02	5.04	0.00	0.2763	0.0130		0.0372	0.0238	-0.0005	-0.0005	0.0032	0.014409
25.	8.	2.49	0.12	20.02	5.52	0.00	0.2931	0.0124	0.2906	0.0405	0.0239	-0.0007	-0.0005	0.0028	0.014384
25.	9.	2.49	0.12	20.02	6.05	0.00	0.3175	0.0116	0.3145	0.0450	0.0245	-0.0011	-0.0008	0.0023	0.014391
25.	10.	2.49	0.12	20.02	8.04	0.00	0.4178	0.0155	0.4115	0.0738	0.0355	0.0044	-0.0009	-0.0067	0.014294
25.	11.	2.49	0.12	20.03	10.09	0.00	0.5057	0.0196	0.4944	0.1078	0.0607	0.0003	-0.0021	-0.0036	0.014314
25.	12.	2.49	0.12	20.04	12.08	0.00	0.6140	0.0267	0.5949	0.1546	0.0918	0.0002	-0.0034	-0.0032	0.014393
25.	13.	2.48	0.12	19.82	16.03	0.00	0.8220	0.0335	0.7808	0.2592	0.1394	0.0047	-0.0077	-0.0112	0.014449
25.	14.	2.47	0.12	19.73	20.01	0.00	1.0432	0.0396	0.9667	0.3942	0.1958	0.0086	-0.0222	-0.0396	0.014467
26.	2.	2.54	0.12	20.13	-2.00	0.00	0.0519	0.0209	0.0526	0.0191	0.0142	0.0001	0.000	0.0004	A AA010A
26. 26.		2.54	0.12	20.13	-2.00 0.02	0.00	0.0319	0.0209	0.0326	0.0191	0.0142 0.01 69	-0.0001 -0.0004	-0.0002 -0.0003	-0.0004 -0.0015	0.008182 0.008150
26.	3 4.	2.54	0.12	20.13	2.08	0.00	0.1842	0.0211	0.1139	0.0212	0.0109	-0.0004	-0.000 4	-0.0015 -0.0018	0.008130
26.	5.	2.53	0.12	20.02	4.18	0.00	0.2636	0.0188	0.2616	0.0379	0.0223	-0.0009	-0.0003	-0.0031	0.008059
26.	6.	2.54	0.12	20.13	3.02	0.00	0.2183	0.0191	0.2170	0.0306	0.0205	-0.0006	-0.0005	-0.0024	0.008098
26.	7.	2.54	0.12	20.13	4.09	0.00	0.2584	0.0181	0.2564	0.0364	0.0217	-0.0005	-0.0006	-0.0028	0.008070

Run	Point	R	M	q	α	β	C _N	C _A	c_{L}	C _D	C _m	G V	C _n	C _Y	C _q
		0.50	0.10	20.00	4.50	0.00	0.2755	0.0175	0.2733	0.0390	0.0226	-0.0004	-0.0006	-0.0034	0.008079
26.	8.	2.53 2.53	0.12 0.12	20.02 20.02	5.03	0.00	0.2753	0.0175	0.2927	0.0424	0.0234	-0.0001	-0.0008	-0.0036	0.008064
26. 26.	9. 10.	2.53	0.12	20.02	5.54	0.00	0.3163	0.0162	0.3133	0.0466	0.0237	-0.0002	-0.0008	-0.0044	0.008038
26. 26.	11.	2.54	0.12	20.13	6.07	0.00	0.3331	0.0168	0.3294	0.0519	0.0240	-0.0021	-0.0002	-0.0032	0.008015
26. 26.	12.	2.53	0.12	20.02	7.02	0.00	0.3870	0.0202	0.3816	0.0673	0.0373	0.0007	-0.0012	-0.0084	0.008040
26.	13.	2.53	0.12	20.02	8.03	0.00	0.4219	0.0237	0.4145	0.0825	0.0519	-0.0027	-0.0004	-0.0026	0.008095
26.	14.	2.54	0.12	20.15	10.02	0.00	0.5292	0.0273	0.5164	0.1189	0.0727	0.0002	-0.0021	-0.0068	0.008040
26.	15.	2.54	0.12	20.27	12.04	0.00	0.6137	0.0295	0.5940	0.1569	0.0927	-0.0005	-0.0028	-0.0088	0.008031 0.008044
26.	16.	2.52	0.12	19.94	16.04	0.00	0.8398	0.0354	0.7973	0.2661	0.1413	0.0058	-0.0081 -0.0228	-0.0190 -0.0475	0.008044
26.	17.	2.52	0.12	19.96	20.01	0.00	1.0534	0.0406	0.9759	0.3986	0.1962	0.0098	0.0001	-0.0003	0.000000
27.	1.	2.54	0.12	20.24	-2.03	0.00	0.0438	0.0170 0.0174	0.0443	0.0155 0.0173	0.0172	-0.0019	0.0005	-0.0001	0.000000
27.	2.	2.53	0.12	20.13	-0.08	0.00	0.0941 0.1751	0.0174	0.0741	0.0173	0.0204	-0.0010	0.0000	-0.0012	0.000000
27.	3.	2.53	0.12	20.13	2.09 3.01	0.00 0.00	0.1751	0.0155	0.1954	0.0258	0.0219	-0.0024	0.0004	-0.0001	0.000000
27. ~~	4.	2.53 2.52	0.12 0.12	20.13 20.02	4.07	0.00	0.2387	0.0152	0.2371	0.0321	0.0239	-0.0023	0.0003	-0.0015	0.000000
27. 27.	5. 6.	2.53	0.12	20.02	4.51	0.00	0.2617	0.0157	0.2597	0.0363	0.0256	-0.0018	0.0001	-0.0008	0.000000
27. 27.	7.	2.52	0.12	19.90	5.08	0.00	0.2953	0.0173	0.2927	0.0434	0.0287	-0.0018	0.0001	-0.0012	0.000000
27.	8.	2.52	0.12	20.02	5.53	0.00	0.3143	0.0180	0.3111	0.0483	0.0331	-0.0019	0.0000	-0.0025	0.000000
27.	9.	2.52	0.12	20.02	6.07	0.00	0.3348	0.0199	0.3308	0.0552	0.0385	-0.0026	0.0001	-0.0006	0.000000
27.	10.	2.53	0.12	20.02	7.05	0.00	0.3784	0.0216	0.3729	0.0679	0.0478	-0.0023	-0.0002	-0.0028	0.000000
27.	11.	2.53	0.12	20.02	8.05	0.00	0.4319	0.0233	0.4244	0.0835	0.0567	-0.0006	-0.0010	-0.0047	0.000000
27.	12.	2.53	0.12	20.15	10.01	0.00	0.5206	0.0255	0.5083	0.1156	0.0743	-0.0003	-0.0016	-0.0064	0.000000
27.	13.	2.53	0.12	20.15	12.04	0.00	0.6247	0.0284	0.6050	0.1580	0.0946	0.0006	-0.0032	-0.00 9 0 -0.0156	0.000000
27.	14.	2.53	0.12	20.05	16.05	0.00	0.8196	0.0339	0.7783	0.2591	0.1422	0.0042 0.0084	-0.0072 -0.0222	-0.0156	0.000000
27.	15. 	2.50	0.11	19.62	20.01	0.00	1.0472	0.0394	0.9705	0.3954	0.1987	-0.0008	-0.0008	0.0035	0.025560
28.	2.	2.56	0.12	20.36	-2.03	0.00	0.0468	0.0168	0.0473	0.0174	0.0130	-0.0005	-0.0012	0.0025	0.025483
28.	3.	2.56	0.12	20.36	0.04	0.00	0.1109 0.1773	0.0173 0.0165	0.1766	0.0228	0.0204	-0.0013	-0.0010	0.0023	0.025365
28.	4.	2.55	0.12	20.36	2.03 3.09	0.00 0.00	0.1773	0.0163	0.1760	0.0274	0.0215	-0.0017	-0.0009	0.0028	0.025367
28.	5.	2.55	0.12	20.25 20.25	4.03	0.00	0.2527	0.0133	0.2510	0.0326	0.0223	-0.0010	-0.0013	0.0015	0.025302
28.	6.	2.55 2.55	0.12 0.12	20.25	4.54	0.00	0.2726	0.0141	0.2707	0.0356	0.0231	-0.0011	-0.0013	0.0013	0.025349
28. 28.	7. 8 .	2.54	0.12	20.13	5.07	0.00	0.2913	0.0134	0.2890	0.0391	0.0239	-0.0013	-0.0012	0.0015	0.025249
28. 28.	9.	2.55	0.12	20.25	5.50	0.00	0.3120	0.0128	0.3093	0.0426	0.0239	-0.0005	-0.0016	0.0001	0.025159
28.	10.	2.54	0.12	20.13	6.04	0.00	0.3345	0.0120	0.3314	0.0472	0.0247	-0.0011	-0.0017	-0.0003	0.025151
28.	11.	2.54	0.12	20.14	7.10	0.00	0.3742	0.0101	0.3701	0.0563	0.0287	-0.0008	-0.0021	-0.0027	0.025083
28.	12.	2.54	0.12	20.25	8.01	0.00	0.4112	0.0092	0.4059	0.0665	0.0309	-0.0010	-0.0022	-0.0010	0.024926
28.	13.	2.54	0.12	20.26	10.04	0.00	0.5132	0.0141	0.5029	0.1034	0.0462	0.0039	-0.0024	-0.0141	0.024749
28.	14.	2.55	0.12	20.38	12.07	0.00	0.6091	0.0181	0.5918	0.1451	0.0730	0.0003	-0.0048	-0.0127	0.024772
28.	15.	2.55	0.12	20.28	16.05	0.00	0.8157	0.0238	0.7773	0.2484	0.1219	0.0030	-0.0089	-0.01 84 -0.0376	0.024672 0.025185
28.	16.	2.52	0.12	19.96	20.02	0.00	1.0456	0.0368	0.9698	0.3926	0.1920	0.0053	-0.0212 0.0000	0.0047	0.020746
29.	1.	2.54	0.12	20.25	-2.04	0.00	0.0376	0.0162	0.0382	0.0148	0.0146 0.0173	-0.0019 -0.0023	-0.0001	0.0037	0.020792
29.	2.	2.53	0.12	20.13	-0.08	0.00	0.0940	0.0166 0.0158	0.0940 0.1653	0.0165 0.0216	0.0173	-0.0025	-0.0001	0.0037	0.020757
29.	3.	2.53	0.12	20.02	2.01	0.00	0.1660 0.2036	0.0138	0.2026	0.0255	0.0213	-0.0025	-0.0002	0.0032	0.020640
29.		2.53	0.12	20.13	3.05	0.00	0.2409	0.0147	0.2393	0.0308	0.0223	-0.0025	-0.0003	0.0025	0.020647
29.	5.	2.53 2.53	0.12 0.12	20.02 20.02	4.02 4.51	0.00	0.2583	0.0140	0.2564	0.0336	0.0230	-0.0024	-0.0004	0.0022	0.020616
29.		2.53 2.53		20.02	5.02	0.00	0.2777	0.0125	0.2756	0.0368	0.0237	-0.0022	-0.0004	0.0022	0.020508
29. 29.		2.53	0.12	20.13	5.55	0.00	0.2984	0.0119	0.2959	0.0407	0.0239	-0.0023	-0.0005	0.0015	0.020454
29.		2.53		20,13	6.07	0.00	0.3210	0.0111	0.3180	0.0450	0.0244	-0.0025	-0.0006	0.0016	0.020447
29.		2.53	0.12	20.02	7.06	0.00	0.3581	0.0096	0.3542	0.0536	0.0280	-0.0026	-0.0010	0.0003	0.020433
29.		2.53	0.12	20.14	8.08	0.00	0.4119	0.0098	0.4064	0.0676	0.0276	-0.0012	-0.0015	-0.0007	0.020321
29.		2.53		20.14	10.01	0.00	0.5030	0.0167	0.4925	0.1038	0.0551	-0.0006	-0.0020	-0.0069	0.020405
29.		2.53		20.15	12.01	0.00	0.6057	0.0191	0.5885	0.1447	0.0730	0.0003	-0.0039	-0.0090	0.020321
29.		2.52	0.12	19.94	16.03	0.00	0.8258	0.0314	0.7850		0.1372	0.0031	-0.0074	-0.0113	0.020591
29.		2.50	0.11	19.62	20.00	0.00	1.0508	0.0377	0.9745	0.3948	0.1954	0.0064	-0.0218 -0.0032	-0.0403	0.020660
30.		1.78		9.90	6.03	0.00	0.3031	0.0139	0.2999		0.0266 0.0328	-0.0049 -0.0052	-0.0032	0.0046	0.045799
30.		1.79		10.01	8.06	0.00	0.3769	0.0099	0.3718		0.0328	-0.0032	-0.0045	0.0032	
30.		1.79		10.02	9.01	0.00	0.4147	0.0088 0.0092	0.4082 0.4637		0.0374	-0.0039	-0.0049	0.0028	0.045618
30.		1.79		10.02	10.10	0.00	0.4726 0.5128	0.0092	0.4637		0.0408	-0.0010	-0.0051	0.0009	0.045294
30.		1.80		10.13	11.02 12.00	0.00	0.5653	0.0103	0.5499		0.0597	0.0005	-0.0052	-0.0162	
30.	. 6.	1.79	0.08	10.02	12.00	0.00	0.5055	0.0170	4.0-00			· -			

					NASA L	ungley Re	escarch Cer	ptor 14-	by 22-Foo	t Subsonic	c Tunnel	Test 391			
Run	Point	R	М	q	α	β	C _N	C _A	c_L	c_{D}	C _m	G	C _n	C _Y	$\mathbf{C}_{\mathbf{q}}$
30.	7.	1.80		10.14	13.06	0.00	0.6197	0.0155	0.6002	0.1551	0.0656	0.0029	-0.0066	-0.0200	0.044908
30.	8.	1.79		10.02	14.05	0.00	0.6732	0.0188	0.6483	0.1816	0.0850	-0.0036			
30.	9.	1.79		10.03	15.01	0.00	0.7219	0.0199	0.6921	0.2062	0.0957	-0.0039	-0.0083		
30. 30.	10. 11.	1.79 1.79		10.03	16.01	0.00	0.7749	0.0212	0.7390				-0.0069		
30.	12.	1.78		10.03 9.92	17.10 20.06	0.00	0.8175	0.0213	0.7751		0.1192		-0.0107		
		1.70	0.00	7.72	20.00	0.00	0.9802	0.0239	0.9125	0.3588	0.1611	-0.0060	-0.0229	-0.0327	0.045412
31. 31.	1. 2.	3.98 3.96		50.27 49.92	-2.09 -0.06	0.00	0.0454 0.1042	0.0152 0.0158	0.0459 0.1042		0.0147		-0.0007	0.0018	
31.	3.	3.95		49.81	2.04	0.00	0.1779	0.0138	0.1042		0.0178		-0.0007	0.0019	
31.	4.	3.95	0.18	49.81	3.08	0.00	0.2148	0.0139	0.2137		0.0208		-0.0007 -0.0007	0.0018 0.0018	
31.	5.	3.96	0.18	50.04	4.08	0.00	0.2536	0.0126	0.2521		0.0228	-0.0011	-0.0007	0.0015	
31.	6.	3.96	0.18	50.16	4.49	0.00	0.2684	0.0120	0.2667	0.0330	0.0232	-0.0011	-0.0008	0.0013	
31.	7.	3.94	0.18	49.81	5.03	0.00	0.2908	0.0113	0.2887	0.0368	0.0241	-0.0010	-0.0009	0.0013	
31.	8.	3.94		49.93	5.57	0.00	0.3126	0.0105	0.3101	0.0408	0.0246	-0.0012	-0.0010	0.0010	
31.	9.	3.95		50.16	6.03	0.00	0.3301	0.0098	0.3272	0.0444	0.0253	-0.0012	-0.0011	0.0008	
31.	10.	3.96		50.39	7.04	0.00	0.3678	0.0085	0.3640	0.0536	0.0283	-0.0009	-0.0014	0.0003	
31.	11.	3.96		50.40	7.99	0.00	0.4189	0.0092	0.4136	0.0673	0.0289	-0.0008	-0.0018	-0.0006	
31.	12.	3.96	0.19	50.53	10.06	0.00	0.5137	0.0154	0.5031	0.1048	0.0562	-0.0001	-0.0026	-0.0039	0.019325
31. 31.	13. 14.	3.96 3.95	0.19	50.43	12.08	0.00	0.6205	0.0187	0.6029	0.1481	0.0750	0.0032	-0.0050	-0.0097	0.019198
31.	15.	3.93	0.18 0.18	50.37 49.51	16.05 20.03	0.00	0.8335 1.0582	0.0274	0.7934	0.2568	0.1277	0.0043	-0.0089	-0.0136	
								0.0393	0.9807	0.3993	0.1957	0.0089	-0.0169	-0.0240	0.019653
32.	1.	3.92	0.18	49.92	-2.05	0.00	0.0460	0.0139	0.0464	0.0123	0.0147	-0.0004	-0.0003	0.0021	0.016308
32. 32.	2.	3.92	0.18	49.80	-0.06	0.00	0.1068	0.0145	0.1068	0.0144	0.0176	-0.0008	-0.0005	0.0021	0.016539
32.	3. 4.	3.94 3.93	0.19	50.38	2.02	0.00	0.1789	0.0138	0.1783	0.0201	0.0204	-0.0010	-0.0004	0.0022	0.016320
32	4. 5.	3.93	0.18 0.18	50.15 50.27	3.10	0.00	0.2186	0.0129	0.2175	0.0247	0.0216	-0.0009	-0.0005	0.0020	0.016242
32.	6.	3.94	0.19	50.38	4.05 4.53	0.00	0.2562	0.0120	0.2548	0.0300	0.0226	-0.0007	-0.0006	0.0017	0.016166
32.	7.	3.94	0.19	50.39	5.06	0.00 0.00	0.2737 0.2945	0.0114	0.2720	0.0329	0.0233	-0.0008	-0.0006	0.0015	0.015952
32.	8.	3.93	0.18	50.27	5.50	0.00	0.2343	0.0107 0.0100	0.2924 0.3102	0.0366 0.0400	0.0240 0.0244	-0.0007	-0.0007	0.0012	0.015941
32.	9.	3.93	0.18	50.16	6.06	0.00	0.3355	0.0094	0.3102	0.0447	0.0244	-0.000 9 -0.0009	-0.0008	0.0013	0.016009
32.	10.	3.93	0.18	50.28	7.05	0.00	0.3768	0.0084	0.3729	0.0546	0.0272	-0.0004	-0.0009 -0.0013	0.0006 0.0004	0.015862
32.	11.	3.93	0.19	50.40	8.08	0.00	0.4251	0.0096	0.4195	0.0693	0.0312	-0.0006	-0.0015	-0.0011	0.015727 0.015626
32.	12.	3.93	0.18	50.19	10.04	0.00	0.5196	0.0161	0.5088	0.1064	0.0578	0.0004	-0.0023	-0.0051	0.015713
32.	13.	3.93	0.18	50.32	12.01	0.00	0.6280	0.0201	0.6101	0.1503	0.0770	0.0022	-0.0045	-0.0089	0.015678
32	14.	3.91	0.18	49.91	16.00	0.00	0.8405	0.0312	0.7993	0.2617	0.1361	0.0055	-0.0089	-0.0114	0.015785
32.	15.	3.92	0.18	50.20	20.06	0.00	1.0588	0.0401	0.9808	0.4008	0.1972	0.0078	-0.0142	-0.0200	0.015744
33.	1.	3.92	0.18	50.26	-2.08	0.00	0.0423	0.0137	0.0427	0.0122	0.0144	-0.0006	-0.0001	0.0021	0.013252
33. 33.	2.	3.91	0.18	50.03	0.00	0.00	0.1081	0.0145	0.1081	0.0145	0.0176	-0.0009	-0.0003	0.0020	0.013250
33.	3. 4.	3.91 3.91	0.18	50.04	2.01	0.00	0.1755	0.0138	0.1749	0.0199	0.0203	-0.0011	-0.0002	0.0019	0.013127
33.	5 .	3.91	0.18 0.18	50.04 49.92	3.01	0.00	0.2130	0.0130	0.2120	0.0242	0.0215	-0.0011	-0.0003	0.0016	0.012803
33.	5. 6.	3.90	0.18	49.92 49.92	4.10 4.54	0.00 0.00	0.2554 0.2723	0.0117	0.2539	0.0299	0.0226	-0.0010	-0.0004	0.0014	0.013008
33.	7.	3.91	0.18	50.04	5.07	0.00	0.2723	0.0113 0.0106	0.2706 0.2911	0.0328 0.0364	0.0232 0.0241	-0.0009 -0.0009	-0.0004	0.0013	0.012894
33.	8.	3.91	0.18	50.04	5.50	0.00	0.3096	0.0100	0.3072	0.0397	0.0241	-0.0009	-0.0005 -0.0006	0.0011	0.012902
33.	9.	3.91	0.18	50.16	6.05	0.00	0.3314	0.0094	0.3286	0.0397	0.0251	-0.0011	-0.0006	0.0008 0.0007	0.012872 0.012806
33.	10.	3.92	0.18	50.28	7.03	0.00	0.3777	0.0091	0.3738	0.0552	0.0261	-0.0009	-0.0007	0.0007	0.012606
33.	11.	3.92	0.19	50.51	8.09	0.00	0.4325	0.0113	0.4266	0.0720	0.0314	0.0007	-0.0013	-0.0006	0.012524
33.	12.	3.92	0.19	50.42	10.0 9	0.00	0.5237	0.0175	0.5126	0.1090	0.0611	0.0008	-0.0022	-0.0041	0.012539
33.	13.	3.90	0.18	50.09	12.03	0.00	0.6224	0.0220	0.6041	0.1512	0.0845	0.0012	-0.0040	-0.0069	0.012338
33. 33.	14. 15	3.89	0.18	49.79	16.03	0.00	0.8396	0.0322	0.7981	0.2628	0.1412	0.0053	-0.0088	-0.0118	0.012757
<i>33</i> .	15.	3.89	0.18	49.74	20.00	0.00	1,0560	0.0398	0.9787	0.3987	0.1973	0.0092	-0.0163	-0.0242	0.012723
34. 34.	2. 3.	3.96 3.93	0.18 0.18	49.92	-1.99	0.00	0.0503	0.0158	0.0509	0.0141	0.0146	0.0000	-0.0003	0.0001	0.008952
34. 34.	3. 4.	3.96	0.18	49.34 50.26	0.05	0.00	0.1126	0.0163	0.1126	0.0164	0.0175	-0.0003	-0.0004	-0.0002	0.008894
34.	4 . 5.	3.95	0.19	49.92	2.05 3.04	0.00	0.1816	0.0153	0.1809	0.0218	0.0201	-0.0004	-0.0004	-0.0005	0.008717
34.		3.95	0.18	49.92 50. 0 4	4.04	0.00	0.2188 0.2580	0.0144	0.2178	0.0260	0.0216	-0.0004	-0.0005	-0.0005	0.008679
34.		3.95	0.18	50.04	4.52	0.00	0.2758	0.0133	0.2564 0.2740	0.0314 0.0343	0.0223	-0.0003	-0.0005	-0.0008	0.008432
34.		3.95	0.19	50.15	5.07	0.00	0.2738	0.0126		0.0343	0.0230	-0.0002 -0.0002	-0.0006	-0.0011	0.008586
34.		3.94	0.18	49.93	5.50	0.00	0.3154	0.0117		0.0379	0.0241	-0.0002 -0.0005	-0.0007 -0.0007		0.008523
34.		3.94	0.19	50.16	6.01	0.00	0.3364	0.0108		0.0460	0.0246		-0.0007	-0.0010 -0.0015	0.008628 0.008573
34.		3.94	0.19	50.16	7.04	0.00	0.3906	0.0128	0.3861	0.0605	0.023		-0.0006		0.008453
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						-,		•							
_	D-1-4	ъ	M	~	α	β	Cw	C _A	C_{L}	\mathbf{C}_{D}	C _{ma}	G	ርฐ	C_{Y}	$C_{\mathbf{q}}$
Run	Point	R	M	q	•	Service Control	C _N	^	-	-	53.₩				
														ž	
24	10	3.93	0.18	50.06	8.09	0.00	0.4383	0.0164	0.4316	0.0779	0.0458	0.0004	-0.0014		0.008560
34.	12.	3.94	0.19	50.29	9.09	0.00	0.4849	0.0185	0.4759	0.0949	0.0566	0.0006	-0.0017		0.008585
34.	13.	3.94	0.19	50.30	9.99	0.00	0.5301	0.0220	0.5182	0.1136	0.0701	-0.0003	-0.0016	0	0.008605
34.	14.	3.93	0.19	50.21	12.01	0.00	0.6311	0.0256	0.6120	0.1564	0.0930	0.0007	-0.0037		0.008643
34.	15. 16.	3.92	0.18	49.91	16.05	0.00	0.8413	0.0327	0.7995	0.2640	0.1426	0.0060	-0.0099		0.008317
34.	16. 17.	3.91	0.18	49.85	20.09	0.00	1.0607	0.0404	0.9822	0.4024	0.1987	0.0107	-0.0180	-0.0283	0.008461
34.	17.	3.71	0.10	47.00											
35.	1.	3.91	0.19	50.15	-2.07	0.00	0.0467	0.0139	0.0472	0.0122	0.0146	0.0001	-0.0002	-0.0002	0.004344
35.	2.	3.90	0.18	49.80	0.06	0.00	0.1122	0.0145	0.1122	0.0147	0.0177	-0.0004	-0.0004	-0.0003	0.004137
35.	3.	3.90	0.18	49.92	2.03	0.00	0.1794	0.0138	0.1788	0.0202	0.0204	-0.0004	-0.0003	-0.0003	0.004264
35.	4.	3.90	0.18	49.92	3.02	0.00	0.2171	0.0130	0.2161	0.0244	0.0220	-0.0004	-0.0003	-0.0003	0.004217
35.	5.	3.90	0.18	49.92	4.07	0.00	0.2567	0.0120	0.2552	0.0302	0.0232	-0.0002	-0.0005	-0.0009	0.004224
35.	6.	3.88	0.18	49.69	4.51	0.00	0.2710	0.0117	0.2692	0.0330	0.0241	-0.0009	-0.0003	0.0001	0.004098
35.	7.	3.88	0.18	49.81	5.06	0.00	0.2983	0.0116	0.2961	0.0379	0.0257	-0.0001	-0.0006	-0.0011	0.004210
35.	8.	3.86	0.18	49.24	5.53	0.00	0.3260	0.0124	0.3233	0.0437	0.0259	-0.0003	-0.0007	-0.0016	0.004098 0.004183
35.	9.	3.88	0.18	49.81	6.04	0.00	0.3523	0.0139	0.3489	0.0509	0.0296	-0.0004	-0.0007	-0.0021	0.004131
35.	10.	3.88	0.18	49.82	7.06	0.00	0.3917	0.0166	0.3867	0.0646	0.0422	-0.0009	-0.0007	-0.0017	0.004171
35.	11.	3.89	0.18	50.06	8.07	0.00	0.4374	0.0196	0.4304	0.0808	0.0549	-0.0015	-0.0006	-0.0002 -0.0022	0.004171
35.	12.	3.88	0.18	49.95	9.02	0.00	0.4866	0.0212	0.4773	0.0972	0.0641	-0.0005	-0.0012	-0.0022	0.004254
35.	13.	3.88	0.18	49.84	10.03	0.00	0.5362	0.0231	0.5240	0.1161	0.0746	0.0000	-0.0019 -0.0039	-0.0038	0.004254
35.	14.	3.88	0.18	49.86	12.06	0.00	0.6352	0.0264	0.6156	0.1585	0.0953	0.0013	-0.0039	-0.0144	0.004196
35.	15.	3.87	0.18	49.68	16.02	0.00	0.8465	0.0332	0.8045	0.2655	0.1434	0.0058	-0.0054	-0.0240	0.004083
35.	16.	3.88	0.18	49.97	20.03	0.00	1.0689	0.0413	0.9901	0.4050	0.2001	0.0093	-0.0133	-0.0240	0.004000
								0.0104	0.0470	0.0117	0.0148	0.0000	-0.0005	-0.0001	0.013430
36.	1.	5.55	0.28	109.61	-2.08	0.00	0.0467	0.0134	0.0472	0.0117 0.0145	0.0148	-0.0003	-0.0006	-0.0001	0.013321
36.	2.	5.56	0.28	110.19	0.07	0.00	0.1135	0.0144	0.1134 0.1788	0.0200	0.0206	-0.0005	-0.0006	0.0005	0.013076
36.	3.	5.56	0.28	110.54	1.95	0.00	0.1794	0.0139	0.1788	0.0247	0.0222	-0.0005	-0.0007	0.0009	0.012889
36.	4.	5.53	0.28	109.74	3.05	0.00	0.2194	0.0131 0.0119	0.2569	0.0302	0.0233	-0.0002	-0.0008	0.0007	0.012778
36.	5.	5.54	0.28	110.32	4.07	0.00	0.2584 0.2750	0.0119	0.2733	0.0330	0.0237	-0.0002	-0.0008	0.0006	0.012558
36.	6.	5.53	0.28	110.20	4.49	0.00	0.2730	0.0113	0.2967	0.0371	0.0249	-0.0003	-0.0009	0.0004	0.012495
36.	7.	5.53	0.28	110.32	5.06 5.50	0.00	0.3148	0.0104	0.3123	0.0405	0.0255	-0.0005	-0.0010	0.0004	0.012444
36.	8.	5.53	0.28	110.21 109.98	6.07	0.00	0.3388	0.0098	0.3358	0.0456	0.0262	-0.0004	-0.0012	0.0003	0.012183
36.	9.	5.51 5.52	0.28	110.57	7.08	0.00	0.3875	0.0104	0.3833	0.0581	0.0272	-0.0008	-0.0014	0.0003	0.0116 95
36.		5.52 5.51	0.28	110.24	8.06	0.00	0.4363	0.0128	0.4302	0.0738	0.0346	-0.0012	-0.0011	-0.0008	0.011955
36.		5.51	0.28	110.26	9.08	0.00	0.4796	0.0166	0.4710	0.0921	0.0515	-0.0003	-0.0015	-0.0035	0.011810
36. 36.		5.50		110.16	10.02	0.00	0.5238	0.0186	0.5126	0.1095	0.0617	-0.0002	-0.0022	-0.0046	0.012059
36.		5.50		110.55	12.00	0.00	0.6235	0.0233	0.6051	0.1525	0.0848	0.0009	-0.0037	-0.0065	0.012062
36.		5.47	0.28	109.51	16.06	0.00	0.8388	0.0344	0.7965	0.2651	0.1423	0.0046	-0.0100	-0.0151	0.012373
36.		5.47		109.65	20.00	0.00	1.0547	0.0439	0.9760	0.4019	0.1986	0.0082	-0.0223	-0.0380	0.012001
30.													0.0000	0.0015	0.011821
37.	1.	5.43	0.28	109.96	-2.07	0.00	0.0492	0.0138	0.0497	0.0120	0.0146	-0.0006	-0.0002 -0.0004	-0.0015 -0.0015	0.011599
37.		5.39	0.27	108.58	0.02	0.00	0.1136	0.0148	0.1136	0.0148	0.0176	-0.0009	-0.0004	-0.0010	0.011407
37.		5.41	0.28	109.50	2.04	0.00	0.1842	0.0142	0.1836	0.0207	0.0206	-0.0012 -0.0011	-0.0004	-0.0010	0.011150
37.	. 4.	5.41	0.28	109.74	3.07	0.00	0.2228	0.0134	0.2217	0.0253	0.0221 0.0231	-0.0011	-0.0005	-0.0010	0.011129
37.	. 5.	5.41	0.28	109.86	4.02	0.00	0.2593	0.0123	0.2578		0.0237	-0.0009	-0.0005	-0.0015	0.010870
37.	. 6.	5.42	0.28	110.20	4.56	0.00	0.2801	0.0117	0.2783	0.0340 0.0373	0.0247	-0.0010	-0.0006	-0.0016	0.010818
37	. 7.	5.42	0.28	110.44	5.02	0.00	0.2988	0.0112	0.2966		0.0252	-0.0013	-0.0007	-0.0016	0.010766
37	. 8.	5.41	0.28	110.32	5.50	0.00	0.3181	0.0107	0.3156 0.3375		0.0252	-0.0013		-0.0017	0.010571
37	. 9.	5.41		110.10	6.03	0.00	0.3405	0.0103	0.3373		0.0281	-0.0012		-0.0017	0.010541
37	. 10.	5.40		110.22	7.03	0.00	0.3894	0.0111 0.0139	0.3831		0.0362	-0.0016		-0.0015	0.010609
37		5.41		110.47	8.01	0.00	0.43 69 0.480 9	0.0139	0.4722		0.0527	-0.0001		-0.0052	0.010405
37		5.40		110.49	9.04	0.00	0.5295	0.0175	0.5180		0.0629	0.0004		-0.0053	0.010648
37		5.39		110.16	10.01	0.00 0.00	0.6305	0.0258	0.6112		0.0906	-0.0004		-0.0056	0.010762
37		5.39		110.33 110.78	12.06 16.07	0.00		0.0351	0.7998		0.1437	0.0047		-0.0175	0.010712
37		5.39		110.78	20.02	0.00		0.0451	0.9762		0.2013	0.0087	-0.0219	-0.0371	0.010445
37	. 16.	5.37	7 0.28	110.00	20.02	Ç.00	2,320								
25	. 1	5.26	5 0.28	109.04	-2.06	0.00	0.0519	0.0142	0.0524	0.0123	0.0145	-0.0007		-0.0036	
38 38		5.20			0.01	0.00		0.0151	0.1168	0.0152	0.0176			-0.0035	
38		5.2			2.06	0.00		0.0145	0.1867						
38		5.2			3.05	0.00		0.0137	0.2228					-0.0032	
38					4.00	0.00			0.2596						
38					4.53	0.00									
. 38				110.44	5.01	0.00	0.3003	0.0117	0.2981	0.0378	0.0247	-0.0011	ı -0.0005	-0.003	

Ru	n Poin	t R	М	q	ά	β	C _N	C _A	$\mathbf{c}_{\mathtt{L}}$	C_D	C _m	q	Ca	$C_{\mathbf{Y}}$	$\mathbf{C}_{\mathbf{q}}$
38		5.2			5.53	0.00			0.3187		0.0252	-0.0013	3 -0.0006	-0.0036	0.008328
38		5.20			6.00	0.00			0.3395		0.0259	-0.0012	-0.0008	-0.0035	0.008381
38		5.2			7.00	0.00	_		0.3926		0.0275	-0.0012	-0.0009	-0.0037	0.008376
38		5.27			8.08	0.00			0.4355		0.0449	-0.0005	-0.0009	-0.0054	0.008427
38 38		5.26			8.99	0.00			0.4771	0.0958	0.0567	-0.0005		-0.0054	0.008497
38		5.26			10.01	0.00		0.0239	0.5230		0.0716	-0.0012	-0.0013	-0.0044	0.008449
38		5.25 5.25			12.05	0.00	0.6380		0.6180		0.0950			-0.0095	0.008695
38		5.24			16.08	0.00	0.8468	0.0374	0.8033	0.2705	0.1488			-0.0213	0.008455
					20.10	0.00	1.0677	0.0467	0.9867	0.4107	0.2049	0.0091	-0.0226	-0.0390	0.008393
39		5.19			-2.09	0.00	0.0535	0.0145	0.0540	0.0126	0.0145	-0.0007	-0.0001	-0.0042	0.006054
39		5.21		110.53	-0.03	0.00	0.1172	0.0154	0.1172	0.0154	0.0177	-0.0011	-0.0002	-0.0039	0.006042
39.		5.20		110.19	2.05	0.00	0.1900	0.0149	0.1893	0.0217	0.0205	-0.0012		-0.0037	0.005603
39. 39.		5.20 5.20		110.08	3.07	0.00	0.2278	0.0141	0.2268	0.0263	0.0220	-0.0012		-0.0040	0.005818
39.		5.20		109.85 109.86	4.08	0.00	0.2656	0.0131	0.2640	0.0320	0.0232	-0.0010		-0.0041	0.005591
39.		5.19		109.86	4.56	0.00	0.2844	0.0126	0.2825	0.0352	0.0240	-0.0011	-0.0004	-0.0043	0.005656
39.		5.19		109.52	5.01 5.56	0.00	0.3019 0.3270	0.0123	0.2997	0.0386	0.0251	-0.0011	-0.0005	-0.0043	0.005549
39.		5.19		109.76	6.03	0.00		0.0123	0.3242	0.0440	0.0262	-0.0010	-0.0006	-0.0045	0.005410
39.		5.19		109.77	7.10	0.00	0.3545 0.4018	0.0134	0.3511	0.0505	0.0264	-0.0011	-0.0006	-0.0052	0.005532
39.	11.	5.20		110.13	8.05	0.00	0.4453	0.0174	0.3965	0.0669	0.0398	-0.0006	-0.0008	-0.0063	0.005482
39.	12.	5.20		110.15	9.01	0.00	0.4433	0.0200	0.4381	0.0822	0.0511	-0.0009	-0.0009	-0.0056	0.005615
39.	13.	5.20		110.06	10.04	0.00	0.5401	0.0251	0.4808	0.0996	0.0634	-0.0014	-0.0009	-0.0048	0.005694
39.	14.	5.19	0.28	109.99	12.07	0.00	0.6411	0.0293	0.5274 0.6208	0.1188	0.0742	-0.0011	-0.0015	-0.0065	0.005293
39.	15.	5.18	0.28	109.40	16.04	0.00	0.8448	0.0233	0.8015	0.1628 0.2697	0.0968	-0.0006	-0.0032	-0.0098	0.005565
39.	16.	5.17	0.28	109.31	20.05	0.00	1.0629	0.0471	0.9823	0.4086	0.1480 0.2045	0.0052 0.0093	-0.0109 -0.0217	-0.0209 -0.0373	0.005354 0.005325
40.	1.	5.17	0.28	109.73	-2.08	0.00	0.0554	0.0148	0.0559	0.0128	0.0147	-0.0007	0.0000	-0.0045	0.003292
40.	2.	5.16	0.28	109.27	0.00	0.00	0.1193	0.0156	0.1193	0.0156	0.0177	-0.0010	-0.0002	-0.0045	0.003310
40,	3.	5.16	0.28	109.62	2.07	0.00	0.1891	0.0150	0.1884	0.0218	0.0205	-0.0012	-0.0002	-0.0040	0.003259
40.	4.	5.16	0.28	109.62	3.04	0.00	0.2267	0.0143	0.2256	0.0263	0.0221	-0.0011	-0.0002	-0.0043	0.003221
40.	5.	5.17	0.28	109.51	4.05	0.00	0.2657	0.0135	0.2641	0.0322	0.0235	-0.0010	-0.0003	-0.0044	0.003052
40.	6.	5.17	0.28	109.97	4.51	0.00	0.2829	0.0132	0.2810	0.0354	0.0244	-0.0009	-0.0004	-0.0045	0.003084
40.	7.	5.17	0.28	109.86	5.09	0.00	0.3088	0.0134	0.3064	0.0407	0.0262	-0.0009	-0.0004	-0.0046	0.002817
40.	8.	5.17	0.28	109.87	5.54	0.00	0.3335	0.0144	0.3306	0.0465	0.0268	-0.0012	-0.0005	-0.0050	0.003043
40.	9.	5.18	0.28	110.33	5.55	0.00	0.3338	0.0144	0.3308	0.0466	0.0268	-0.0011	-0.0005	-0.0049	0.002954
40.	10.	5.17	0.28	109.99	6.04	0.00	0.3574	0.0161	0.3537	0.0536	0.0322	-0.0017	-0.0006	-0.0043	0.003067
40.	11.	5.17	0.28	109.89	7.05	0.00	0.4039	0.0189	0.3986	0.0684	0.0426	-0.0018	-0.0005	-0.0042	0.003111
40.	12.	5.17	0.28	110.25	8.07	0.00	0.4485	0.0218	0.4410	0.0846	0.0548	-0.0015	-0.0006	-0.0044	0.002985
40.	13.	5.17	0.28	110.04	9.06	0.00	0.4946	0.0237	0.4847	0.1013	0.0646	-0.0012	-0.0011	-0.0057	0.003095
40. 40.	14. 15.	5.17	0.28	110.17	10.07	0.00	0.5419	0.0256	0.5290	0.1199	0.0751	-0.0010	-0.0017	-0.0072	0.003042
40.		5.16 5.16	0.28	109.41	12.04	0.00	0.6411	0.0298	0.6208	0.1628	0.0973	-0.0007	-0.0031	-0.0097	0.003133
40.	16. 17.	5.18	0.28 0.28	109.29	16.07	0.00	0.8438	0.0383	0.8002	0.2703	0.1496	0.0047	-0.0108	-0.0204	0.003020
				110.35	20.04	0.00	1.0616	0.0472	0.9812	0.4080	0.2041	0.0090	-0.0217	-0.0374	0.002952
42	2.	2.43	0.12	20.25	-2.02	0.00	0.0464	0.0207	0.0471	0.0191	0.0150	-0.0005	-0.0015	0.0032	0.022006
42.	3.	2.42	0.12	20.13	-0.05	0.00	0.1054	0.0215	0.1054	0.0214	0.0177	-0.0006	-0.0016	0.0020	0.022092
42.	4.	2.42	0.12	20.02	2.08	0.00	0.1783	0.0209	0.1775	0.0274	0.0204	-0.0008	-0.0015	0.0019	0.021979
42.	5.	2.42	0.12	20.13	3.02	0.00	0.2115	0.0198	0.2101	0.0309	0.0212	-0.0009	-0.0017	0.0013	0.021945
42.	6.	2.42	0.12	20.02	4.01	0.00	0.2512	0.0188	0.2492	0.0363	0.0219	-0.0007	-0.0018	0.0004	0.021914
42	7.	2.42	0.12	20.02	4.49	0.00	0.2696	0.0183	0.2673	0.0393	0.0226	-0.0008	-0.0019	0.0008	0.021860
42.	8.	241	0.12	20.02	5.01	0.00	0.2879	0.0176	0.2852	0.0427	0.0234	-0.0004	-0.0020	0.0002	0.021739
42.	9. 10	2.42	0.12	20.14	5.54	0.00	0.3089	0.0168	0.3058	0.0465	0.0234	-0.0004	-0.0020	0.0000	0.021716
42.	10.	2.42	0.12	20.14	6.07	0.00	0.3293	0.0157	0.3258	0.0504	0.0241	-0.0007	-0.0021	-0.0004	0.021756
42.	11.	2.41	0.12	20.02	7.06	0.00	0.3649	0.0137	0.3605	0.0585	0.0281	-0.0005	-0.0024		0.021703
42. 42.	12. 13.	2.42	0.12	20.14	8.04	0.00	0.3970	0.0116	0.3914	0.0671	0.0307	-0.0002	-0.0029		0.021574
		2.41	0.12	20.02	9.05	0.00	0.4388	0.0101	0.4318	0.0790	0.0345	0.0003	-0.0032		0.021560
42	14.	2.42	0.12	20.14	10.03	0.00	0.4905	0.0104	0.4812	0.0957	0.0342	0.0016	-0.0036	-0.0041	0.021358
42	15.	2.42	0.12	20.15	12.04	0.00	0.5870	0.0188	0.5701	0.1408	0.0683	0.0010	-0.0050		0.021545
42.	16. 17	2.41	0.12	19.94	16.09	0.00	0.8335	0.0322	0.7920	0.2619	0.1212	-0.0003	-0.0053	-0.0046	0.021825
42.	17.	2.40	0.12	19.85	20.00	0.00	1.0486	0.0388	0.9721	0.3952	0.1830	-0.0005	-0.0174		0.021895
43.	I.	2.41	0.12	20.01	-2.06	0.00	0.0445	0.0202	0.0452	0.0186	0.0145	-0.0004	-0.0007	0.0018	0.017341
43.	2.	2.41	0.12	20.02	0.08	0.00	0.1091	0.0207	0.1091	0.0208	0.0174	-0.0005	-0.0010		0.017359
43.	3.	2.41	0.12	20.02	2.04	0.00	0.1756	0.0201	0.1748	0.0263	0.0199	-0.0006	-0.0009		0.017271

Run	Point	R	М	q	α	β	C _N	C _A	c_{L}	C_D	C	G	C _n	С _¥	Cq
43.	4.	2.41	0.12	20.02	3.04	0.00	0.2128	0.0192	0.2115	0.0305	0.0211	-0.0007	-0.0011	0.0003	0.017204
43.	5.	2.41	0.12	20.02	4.00	0.00	0.2484	0.0180	0.2465	0.0353	0.0219	-0.0006	-0.0012	0.0004	0.017146
43.	6.	2.41	0.12	20.02	4.52	0.00	0.2693	0.0175	0.2670	0.0387	0.0225	-0.0008	-0.0012	0.0003	0.017169
43.	7.	241	0.12	20.02	5.06	0.00	0.2886	0.0170	0.2860	0.0424	0.0233	-0.0004	-0.0013	0.0001	0.017154
43.	8.	2.42	0.12	20.13	5.55	0.00	0.3074	0.0158	0.3044	0.0455	0.0233	-0.0005	-0.0014	-0.0003	0.017063
43.	9.	2.41	0.12	20.02	6.01	0.00	0.3258	0.0152	0.3225	0.0493	0.0238	-0.0005	-0.0015	-0.0005	0.0170 59 0.017013
43.	10.	2.41	0.12	20.02	7.03	0.00	0.3628	0.0133	0.3584	0.0576	0.0279 0.0310	-0.0006 -0.0002	-0.0018 -0.0021	-0.0018 -0.0029	0.017013
43.	11.	2.42	0.12	20.14	8.04	0.00	0.3989	0.0114	0.3933 0.4425	0.0670 0.0819	0.0310	0.0002	-0.0021	-0.0033	0.016938
43.	12. 13.	241 241	0.12 0.12	20.02 20.03	9.07 10.03	0.00 0.00	0.4499 0.5118	0.0111	0.5017	0.1020	0.0322	0.0013	-0.0030	-0.0008	0.016909
43. 43.	14.	2.42	0.12	20.03	12.01	0.00	0.5931	0.0209	0.5757	0.1439	0.0720	0.0001	-0.0042	-0.0110	0.016861
43.	15.	2.41	0.12	20.05	16.04	0.00	0.8323	0.0332	0.7907	0.2619	0.1277	0.0014	-0.0060	-0.0076	0.017023
43.	16.	2.41	0.12	19.96	20.01	0.00	1.0464	0.0423	0.9688	0.3978	0.1910	0.0054	-0.0203	-0.0372	0.017125
44.	1.	2.41	0.12	20.01	-2.02	0.00	0.0457	0.0198	0.0464	0.0182	0.0143	-0.0003	-0.0005	0.0029	0.014857
44.	2.	2.41	0.12	20.01	0.04	0.00	0.1082	0.0205	0.1082	0.0206	0.0171	-0.0004	-0.0006	0.0018	0.014823
44.	3.	2.40	0.12	19.90	2.04	0.00	0.1763	0.0201	0.1755	0.0263	0.0199	-0.0007	-0.0006	0.0014	0.014818
44.	4.	2.41	0.12	20.02	3.04	0.00	0.2111	0.0189	0.2098	0.0301	0.0209	-0.0007	-0.0007	0.0011	0.014771
44.	5.	2.42	0.12	20.13	4.08	0.00	0.2503 0.2695	0.0177	0.2484 0.2672	0.0355 0.0387	0.0217 0.0224	-0.0007 -0.0007	-0.0009 -0.0009	0.0007 0.0000	0.014 695 0.014715
44.	6.	2.41	0.12	20.02 20.02	4.55 5.02	0.00 0.00	0.2882	0.0174 0.0168	0.2872	0.0387	0.0224	-0.0007	-0.0009	-0.0001	0.014714
44. 44.	7. 8.	241 241	0.12 0.12	20.02	5.50	0.00	0.3059	0.0160	0.3029	0.0452	0.0233	-0.0004	-0.0011	-0.0006	0.014686
44. 44.	9.	2.40	0.12	19.90	6.05	0.00	0.3300	0.0154	0.3265	0.0501	0.0240	-0.0006	-0.0013	-0.0009	0.014662
44.	10.	2.41	0.12	20.02	7.09	0.00	0.3613	0.0135	0.3569	0.0580	0.0277	-0.0006	-0.0015	-0.0017	0.014647
44.	11.	2.40	0.12	19.91	8.02	0.00	0.3991	0.0122	0.3935	0.0678	0.0307	0.0000	-0.0018	-0.0022	0.014624
44.	12.	241	0.12	20.02	9.03	0.00	0.4603	0.0133	0.4525	0.0854	0.0286	0.0014	-0.0023	-0.0018	0.014554
44.	13.	2.40	0.12	19.91	10.00	0.00	0.5076	0.0202	0.4964	0.1080	0.0509	0.0006	-0.0022	-0.0067	0.014661
44.	14.	2.40	0.12	19.81	12.08	0.00	0.6225	0.0280	0.6028	0.1576	0.0830	-0.0016	-0.0022	-0.0014	0.014816
44.	15.	2.40	0.12	19.94	16.03	0.00	0.8211	0.0363	0.7791	0.2617	0.1340	0.0036	-0.0072	-0.0115	0.014682
44.	16.	2.39	0.12	19.62	20.03	0.00	1.0520	0.0439	0.9733	0.4017	0.1941	0.0064	-0.0210	-0.0403	0.014793
45.	1.	2.42	0.12	20.24	-2.05	0.00	0.0438	0.0208	0.0445	0.0192	0.0139	-0.0003	-0.0001	0.0035	0.009944
45.	2.	2.40	0.12	19.90	-0.06	0.00	0.1049	0.0222	0.1049	0.0220	0.0166	-0.0003	-0.0003	0.0030	0.009971
45.	3.	2.42	0.12	20.13	2.04	0.00	0.1742	0.0212	0.1734	0.0274	0.0193	-0.0005	-0.0003	0.0024	0.009892
45.	4.	2.42	0.12	20.13	3.07	0.00	0.2126	0.0202	0.2112	0.0316	0.0205	-0.0006	-0.0004 -0.0005	0.0014 0.0006	0.009862
45.	5.	2.40	0.12	19.90	4.09 4.56	0.00 0.00	0.2535 0.2699	0.0195 0.0187	0.2515 0.2676	0.0375 0.0400	0.0216 0.0224	-0.0007 -0.0006	-0.0006	. 0.0004	0.009862
45. 45.	6. 7.	2.41 2.41	0.12 0.12	20.02 20.02	5.02	0.00	0.2867	0.0187	0.2840	0.0433	0.0232	-0.0003	-0.0006	0.0003	0.009833
45. 45.	8.	240	0.12	19.79	5.53	0.00	0.3114	0.0176	0.3083	0.0475	0.0235	-0.0003	-0.0008	0.0003	0.009895
45.	9.	2.40	0.12	19.90	6.08	0.00	0.3329	0.0168	0.3293	0.0519	0.0238	-0.0006	-0.0009	-0.0003	0.009850
45.	10.	2.41	0.12	20.02	7.01	0.00	0.3675	0.0159	0.3628	0.0606	0.0259	-0.0006	-0.0011	-0.0015	0.009791
45.	11.	2.41	0.12	20.02	8.02	0.00	0.4252	0.0208	0.4182	0.0800	0.0360	0.0030	-0.0012	-0.0072	0.009759
45.	12.	2.41	0.12	20.02	8.03	0.00	0.4237	0.0208	0.4167	0.0797	0.0364	0.0027	-0.0013	-0.0064	0.009852
45.	13.	2.41	0.12	20.03	9.04	0.00	0.4679	0.0234	0.4584	0.0966	0.0508	0.0006	-0.0018	-0.0049	0.009778
45.	14.	2.40	0.12	19.91	10.04	0.00	0.5200	0.0280_	0.5071	0.1183	0.0672	-0.0007	-0.0011	0.0005	0.009883
45.	15.	2.40	0.12	19.92	12.05	0.00	0.6235	0.0325	0.6030	0.1619	0.0911	0.0005	-0.0031	-0.0055	0.009878
45.	16.	2.41	0.12	19.94	16.03	0.00	0.8306	0.0393	0.7874 0.9706	0.2672	0.1392	0.0044	-0.0073 -0.0216	-0.0131 -0.0418	0.009825
45.	17.	2.39	0.12	19.73	20.01	0.00	1.0497	0.0459	0.9706	0.4024	0.1962	0.0083			
46.	1.	2.42	0.12	20.13	-2.03	0.00	0.0438	0.0219	0.0445	0.0203	0.0137	-0.0001	0.0001	0.0028	0.004477
46.	2.	2.42	0.12	20.24	-0.01	0.00	0.1035	0.0224	0.1035	0.0223	0.0164	-0.0003	0.0000	0.0021	0.004442
46.	3.	2.41	0.12	20.01	2.06	0.00	0.1749	0.0222	0.1740	0.0284	0.0194	-0.0005	0.0000	0.0020	0.004454
46.	4.	2.42	0.12	20.13	3.05	0.00	0.2103	0.0212	0.2088	0.0324	0.0206	-0.0006	-0.0001	0.0014 0.0011	0.004432 0.004452
46.	5.	2.41	0.12	20.02	4.03	0.00	0.2489	0.0205	0.2469	0.0380	0.0220	-0.0006	-0.0003 -0.0004	0.0011	0.004448
46.	6. 7	2.41	0.12	20.02	4.57 5.08	0.00 0.00	0.2694	0.0199 0.0197	0.2670 0.2878	0.0413 0.0453	0.0229 0.0240	-0.0005 -0.0003	-0.0004	0.0009	0.004356
46. 46.	7. 8.	2.42 2.42	0.12 0.12	20.13 20.13	5.08 5.53	0.00	0.2907	0.0197	0.3084	0.0497	0.0240	-0.0003	-0.0007	0.0005	0.004374
46. 46.	8. 9.	2.40	0.12	19.90	6.04	0.00	0.3441	0.0214	0.3400	0.0575	0.0255	-0.0005	-0.0008	0.0003	0.004429
46.	10.	2.42	0.12	20.14	7.01	0.00	0.3837	0.0261	0.3776	0.0727	0.0431	-0.0013	-0.0005	0.0015	0.004418
46.	11.	2.42	0.12	20.14	8.05	0.00	0.4254	0.0274	0.4173	0.0867	0.0520	-0.0012	-0.0007	0.0002	0.004429
46.	12.	2.41	0.12	20.03	9.01	0.00	0.4732	0.0290	0.4628	0.1028	0.0612	-0.0008	-0.0009	0.0000	0.004455
46.	13.	2.41	0.12	20.03	10.03	0.00	0.5191	0.0311	0.5057	0.1210	0.0723	-0.0004	-0.0015	-0.0027	0.004465
46.	14.	2.41	0.12	20.04	12.02	0.00	0.6214	0.0342	0.6007	0.1629	0.0930	0.0009	-0.0030	-0.0061	0.004430
46.	15.	2.41	0.12	20.05	16.09	0.00	0.8290	0.0404	0.7853	0.2685	0.1407	0.0050	-0.0073	-0.0136	0.004368
46.	16.	2.42	0.12	20.19	20.01	0.00	1.0375	0.0463	0.9590	0.3985	0.1946	0.0089	-0.0215	-0.0423	0.004371

Run	Point	R	M	q	α	β	C_N	C _A	C_{L}	$\mathbf{c}_{\mathtt{D}}$	C _m	G	. C ₂	$\mathbf{c}_{\mathbf{Y}}$	Cq
										-					
47.	1.	3.78	0.19	50.15	-2.02	0.00	0.0467	0.0170	0.0473	0.0153	0.0142	-0.0001	0.0000	0.0010	0.002783
47.	2.	3.76	0.18	49.57	0.02	0.00	0.1114	0.0177	0.1114	0.0177	0.0173	-0.0002	-0.0001	0.0007	0.002810
47.	3.	3.77	0.19	49.92	2.03	0.00	0.1803	0.0170	0.1796	0.0233	0.0200	-0.0004	0.0000	0.0012	0.002773
47.	4.	3.76	0.18	49.69	3.07	0.00	0.2187	0.0161	0.2175	0.0278	0.0214	-0.0005	0.0000	0.0011	0.002771
47.	5.	3.76	0.19	49.81	4.04	0.00	0.2558	0.0151	0.2541	0.0330	0.0225	-0.0003	-0.0001	0.0008	0.002756
47.	6. 7.	3.75 3.79	0.18	49.58	4.59	0.00	0.2783 0.2948	0.0147	0.2763	0.0369	0.0239	-0.0002	-0.0002	0.0007	0.002717
47. 47.	7. 8.	3.79	0.19 0.19	50.38 50.50	5.01 5.06	0.00	0.2948	0.0145 0.0145	0.2924	0.0402 0.0406	0.0247 0.0248	-0.0003 -0.0003	-0.0002 -0.0003	0.0005	0.002719
47. 47.	9.	3.79	0.19	50.50	5.53	0.00	0.3232	0.0143	0.3202	0.0465	0.0248	-0.0003	-0.0003	0.0006 0.0007	0.002724 0.002618
47.	10.	3.78	0.19	50.39	6.07	0.00	0.3486	0.0170	0.3448	0.0538	0.0301	-0.0009	-0.0004	0.0006	0.002616
47.	11.	3.78	0.19	50.40	7.07	0.00	0.3941	0.0198	0.3886	0.0682	0.0421	-0.0005	-0.0006	-0.0006	0.002663
47.	12.	3.77	0.19	50.17	8.13	0.00	0.4417	0.0227	0.4340	0.0849	0.0545	-0.0006	-0.0006	0.0002	0.002754
47.	13.	3.77	0.19	50.30	9.08	0.00	0.4861	0.0244	0.4762	0.1008	0.0639	-0.0002	-0.0010	-0.0014	0.002739
47.	14.	3.76	0.19	49.96	10.02	0.00	0.5324	0.0260	0.5198	0.1183	0.0732	-0.0004	-0.0014	-0.0021	0.002789
47.	15.	3.77	0.19	50.09	12.07	0.00	0.6337	0.0295	0.6135	0.1614	0.0948	0.0011	-0.0035	-0.0055	0.002694
47.	16.	3.76	0.19	50.02	15.90	0.00	0.8308	0.0365	0.7890	0.2627	0.1423	0.0060	-0.0090	-0.0132	0.002706
47.	17.	3.76	0.19	49.97	20.06	0.00	1.0618	0.0450	0.9819	0.4065	0.1997	0.0089	-0.0146	-0.0216	0.002601
48.	1.	3.76	0.19	50.26	-2.04	0.00	0.0487	0.0163	0.0493	0.0146	0.0144	0.0000	-0.0001	0.0010	0.006068
48.	2.	3.75	0.19	49.92	0.00	0.00	0.1114	0.0171	0.1114	0.0170	0.0172	-0.0002	-0.0002	0.0007	0.006258
48.	3.	3.75	0.19	50.03	2.07	0.00	0.1829	0.0164	0.1822	0.0230	0.0200	-0.0004	-0.0001	0.0010	0.006187
48.	4.	3.74	0.19	49.81	3.06	0.00	0.2195	0.0157	0.2183	0.0274	0.0212	-0.0005	-0.0002	0.0010	0.006122
48.	5.	3.75	0.19	50.15	4.07	0.00	0.2580	0.0144	0.2564	0.0327	0.0220	-0.0003	-0.0002	0.0007	0.006074
48.	6.	3.75	0.19	50.15	4.56	0.00	0.2780	0.0139	0.2760	0.0360	0.0228	-0.0002	-0.0003	0.0006	0.006034
48.	7.	3.76	0.19	50.27	5.08	0.00	0.2962	0.0134	0.2939	0.0395	0.0236	-0.0002	-0.0003	0.0007	0.006083
48.	8.	3.76	0.19	50.27	5.54	0.00	0.3173	0.0129	0.3146	0.0435	0.0241	-0.0005	-0.0004	0.0003	0.006072
48.	9.	3.76	0.19	50.39	6.08	0.00	0.3406	0.0127	0.3373	0.0487	0.0248	-0.0005	-0.0006	0.0000	0.006039
48.	10.	3.76	0.19	50.39	7.07	0.00	0.3949	0.0154	0.3900	0.0638	0.0291	-0.0008	-0.0008	-0.0002	0.006015
48. 48.	11.	3.75	0.19	50.17	8.04	0.00	0.4371	0.0193	0.4301	0.0803	0.0459	0.0002	-0.0010	-0.0028	0.006039
46. 48.	12. 13.	3.75 3.74	0.19 0.19	50.18 50.07	9.06 10.03	0.00 0.00	0.4863 0.5336	0.0231 0.0249	0.4766 0.5211	0.0 994 0.1175	0.0609 0.0713	-0.0007 -0.0005	-0.0008 -0.0015	0.0003	0.006049
48.	14.	3.75	0.19	50.32	12.11	0.00	0.6361	0.0249	0.5211	0.1173	0.0713	0.0012	-0.0015	-0.0015 -0.0057	0.006089
48.	15.	3.76	0.19	50.37	16.08	0.00	0.8426	0.0250	0.7996	0.2684	0.1437	0.0012	-0.0085	-0.0126	0.005997
48.	16.	3.72	0.18	49.51	20.04	0.00	1.0662	0.0450	0.9862	0.4077	0.1992	0.0084	-0.0143	-0.0215	0.005958
49.	1.	3.74	0.19	50.15	-2.00	0.00	0.0503	0.0162	0.0508	0.0144	0.0145	0.0000	-0.0002	0.0008	0.008714
49.	2.	3.74	0.19	50.03	0.03	0.00	0.1134	0.0167	0.1134	0.0168	0.0172	-0.0002	-0.0003	0.0005	0.008786
49.	3.	3.74	0.19	50.03	2.07	0.00	0.1827	0.0161	0.1820	0.0227	0.0200	-0.0005	-0.0002	0.0011	0.008635
49.	4.	3.75	0.19	50.38	3.02	0.00	0.2176	0.0152	0.2165	0.0266	0.0211	-0.0005	-0.0003	0.0005	0.008637
49.	5.	3.75	0.19	50.27	4.03	0.00	0.2569	0.0141	0.2552	0.0321	0.0220	-0.0004	-0.0004	0.0003	0.008609
49.	6.	3.74	0.19	50.15	4.50	0.00	0.2748	0.0136	0.2729	0.0352	0.0224	-0.0002	-0.0004	0.0002	0.008554
49.	7.	3.74	0.19	50.27	5.06	0.00	0.2964	0.0129	0.2941	0.0390	0.0232	-0.0002	-0.0005	0.0000	0.008523
49.	8.	3.74	0.19	50.16	5.53	0.00	0.3163	0.0123	0.3136	0.0427	0.0236	-0,0004	-0.0005	0.0000	0.008526
49.	9.	3.75	0.19	50.27	6.00	0.00	0.3362	0.0116	0.3332	0.0467	0.0242	-0.0004	-0.0007	-0.0006	0.008362
49.	10.	3.74	0.19	50.28	7.10	0.00	0.3870	0.0112	0.3827	0.0590	0.0258	-0.0001	-0.0012	-0.0004	0.008456
49.	11.	3.73	0.19	49.83	8.81	0.00	0.4711	0.0182	0.4627	0.0902	0.0475	0.0007	-0.0016	-0.0047	0.008491
49.	12.	3.74	0.19	50.19	10.12	0.00	0.5338	0.0212	0.5217	0.1147	0.0630	0.0010	-0.0021	-0.0037	0.008485
49.	13.	3.75	0.19 0.19	50.44	12.08	0.00	0.6328	0.0273	0.6130	0.1591	0.0910	0.0007	-0.0032	-0.0050	0.008498
49. 49.	14. 15.	3.73 3.73	0.19	49.91 50.08	16.01 20.03	0.00 0.00	0.8421 1.0583	0.0360 0.0439	0.7995 0.9792	0.2668 0.4037	0.1430 0.1973	0.0058 0.0091	-0.0087 -0.0150	-0.0128 -0.0225	0.008430 0.008381
50		2.7.4	0.10	ZA 17	^ ^-	A 00	0.040*	0.0150	0.0404	0.01/1	0.0144	0.0000	0 800 4	A AA	0011011
50.	1.	3.74	0.19	50.15	-2.05	0.00	0.0481	0.0158	0.0486	0.0141	0.0144	0.0000	-0.0004	0.0007	0.011264
50. 50.	2.	3.73	0.19	50.03	0.00	0.00	0.1120	0.0165	0.1120	0.0165	0.0172	-0.0002 -0.0005	-0.0005 -0.0004	0.0002 0.0006	0.011315 0.011251
50. 50.	3. . 4.	3.73 3.73	0.19 0.19	49.92 50.04	2.05 3.07	0.00 0.00	0.1830 0.2208	0.0159 0.0151	0.1823 0.2197	0.0225 0.0269	0.0199 0.0211	-0.0005 -0.0005	-0.0004	0.0006	0.011169
50.	5.	3.74	0.19	50.38	4.09	0.00	0.2588	0.0131	0.2197	0.0322	0.0211	-0.0005	-0.0005	0.0002	0.011109
50.	6.	3.74	0.19	50.38	4.51	0.00	0.2752	0.0134	0.2773	0.0350	0.0225	-0.0003	-0.0006	0.0002	0.010984
50.	7.	3.74	0.19	50.39	5.03	0.00	0.2959	0.0137	0.2937	0.0386	0.0232	-0.0003	-0.0006	-0.0001	0.010906
50.	8.	3.74	0.19	50.27	5.52	0.00	0.3134	0.0120	0.3108	0.0421	0.0237	-0.0004	-0.0007	-0.0002	0.010836
50.	9.	3.73	0.19	50.04	6.09	0.00	0.3383	0.0111	0.3352	0.0470	0.0246	-0.0005	-0.0008	-0.0010	0.010834
50.	10.	3.74	0.19	50.39	7.06	0.00	0.3746	0.0098	0.3705	0.0558	0.0282	-0.0003	-0.0012	-0.0016	0.010779
50.	11.	3.75	0.19	50.51	8.08	0.00	0.4346	0.0111	0.4287	0.0720	0.0265	0.0009	-0.0017	-0.0017	0.010670
50.	12.	3.74	0.19	50.41	9.09	0.00	0.4792	0.0148	0.4709	0.0903	0.0411	-0.0016	-0.0020	0.0002	0.010816
50.	13.	3.74	0.19	50.30	10.00	0.00	0.5213	0.0184	0.5102	0.1087	0.0568	0.0010	-0.0022	-0.0063	0.010768

Run	Point	R	M	ą	α	B	_{.≙∰} C _N	C _A	c_{L}	$\mathbf{c}_{\mathtt{D}}$	C _m	Ģ.	C _n	C _Y	Cq
50.	14.	3.74	0.19	50.44	12.10	0.00	0.6316	0.0234	0.6126	0.1553	0.0813	0.0019	-0.0040	-0.0075	0.010792
50.	15.	3.74	0.19	50.25	16.08	0.00	0.8445	0.0352	0.8017	0.2677	0.1420	0.0055	-0.0090	-0.0128	0.010845
50.	16.	3.72	0.18	49.86	20.08	0.00	1.0654	0.0437	0.9856	0.4069	0.1981	0.0082	-0.0141	-0.0211	0.010770
51.	1.	3.73	0.19	50.15	-2.04	0.00	0.0481	0.0155	0.0486	0.0138	0.0146	0.0000	-0.0006	0.0005	0.013909
51.	2.	3.72	0.19	49.92	0.06	0.00	0.1131	0.0161	0.1131	0.0163	0.0174	-0.0003	-0.0007	0.0002	0.013905
51.	3.	3.73	0.19	50.04	2.00	0.00	0.1795	0.0157	0.1788	0.0219	0.0201	-0.0005	-0.0006	0.0005	0.013719
51.	4.	3.73	0.19	50.04	3.04	0.00	0.2176	0.0148	0.2166	0.0263	0.0212	0.0006	-0.0006	0.0006	0.013675
51.	5.	3.73	0.19	50.04	4.04	0.00	0.2567	0.0137	0.2551	0.0317	0.0220	-0.0004	-0.0007	0.0002	0.013574
51.	6.	3.73	0.19	50.04	4.55	0.00	0.2769	0.0130	0.2750	0.0349	0.0227	-0.0002	-0.0008	-0.0002 -0.0002	0.013563 0.013507
51. 51.	7. 8 .	3.72 3.72	0.19 0.19	49.93 49.93	5.09 5.52	0.00	0.2977 0.3156	0.0123 0.0116	0.2954 0.3130	0.0387 0.0420	0.0233 0.0237	-0.0003 -0.0005	-0.0008 -0.0009	-0.0002	0.013307
51. 51.	9.	3.74	0.19	50.39	6.01	0.00	0.3339	0.0110	0.31309	0.0458	0.0243	-0.0006	-0.0010	-0.0006	0.013273
51.	10.	3.75	0.19	50.62	7.03	0.00	0.3697	0.0093	0.3658	0.0545	0.0284	-0.0004	-0.0013	-0.0017	0.013168
51.	11.	3.74	0.19	50.28	8.05	0.00	0.4170	0.0088	0.4117	0.0671	0.0305	-0.0002	-0.0016	-0.0023	0.013130
51.	12.	3.73	0.19	50.29	9.09	0.00	0.4749	0.0117	0.4671	0.0866	0.0354	-0.0013	-0.0027	0.0023	0.013209
51.	13.	3.72	0.19	49.96	10.09	0.00	0.5238	0.0160	0.5129	0.1076	0.0512	-0.0005	-0.0025	-0.0029	0.013072
51.	14.	3.74	0.19	50.32	12.10	0.00	0.6262	0.0210	0.6079	0.1518	0.0752	0.0024	-0.0046	-0.0099	0.013072
51.	15.	3.73	0.19	50.14	16.01	0.00	0.8403	0.0342	0.7983	0.2646	0.1398	0.0053	-0.0088	-0.0116	0.013395
51.	16.	3.74	0.19	50.43	20.05	0.00	1.0592	0.0428	0.9803	0.4034	0.1956	0.0079	-0.0139	-0.0209	0.013160
52.	2.	5.60	0.28	110.19	-2.08	0.00	0.0475	0.0156	0.0480	0.0139	0.0146	0.0001	-0.0003	0.0002	0.008988
52.	3.	5.56	0.28	109.85	-0.03	0.00	0.1114	0.0162	0.1114	0.0161	0.0176	-0.0002	-0.0004	0.0000	0.008954
52	4.	5.54	0.28	109.97	2.09	0.00	0.1833	0.0153	0.1826	0.0220	0.0203	-0.0005	-0.0004	0.0002	0.008743
52.	5.	5.53	0.28	109.85	3.10	0.00	0.2212	0.0144	0.2201	0.0263	0.0215	-0.0004	-0.0004	-0.0001	0.008622
52	6.	5.54	0.28	110.32	4.07	0.00	0.2586	0.0131	0.2570	0.0314	0.0223	-0.0003	-0.0005	-0.0002	0.008561
52.	8.	5.53	0.28	110.44	5.07	0.00	0.2965	0.0117	0.2943	0.0378	0.0237	-0.0002	-0.0005	-0.0003	0.008397
52.	9.	5.52	0.28	110.67	5.57	0.00	0.3170	0.0109	0.3145	0.0416	0.0244	-0.0004	-0.0007	-0.0005	0.008350
52.	10.	5.51	0.28	110.33	6.08	0.00	0.3365	0.0103	0.3335	0.0459	0.0252	-0.0004	-0.0008	-0.0007 -0.0004	0.008128 0.008109
52. 52.	11. 12.	5.50 5.49	0.28 0.28	110.34 110.36	7.08 8.10	00.00 00.0	0.3855 0.4355	0.0102 0.0134	0.3813	0.0577 0.0746	0.0261 0.0346	-0.0002 -0.0015	-0.0012 -0.0014	0.0012	0.008109
52	13.	5.49	0.28	110.37	9.07	0.00	0.4335	0.0172	0.4699	0.0924	0.0510	0.0005	-0.0014	-0.0029	0.008208
52	14.	5.49	0.28	110.39	10.04	0.00	0.5284	0.0197	0.5169	0.1115	0.0620	0.0006	-0.0020	-0.0031	0.008154
52.	15.	5.46	0.28	109.75	12.06	0.00	0.6266	0.0259	0.6074	0.1563	0.0897	0.0007	-0.0031	-0.0040	0.008374
52	16.	5.45	0.28	109.40	16.08	0.00	0.8387	0.0356	0.7960	0.2666	0.1436	0.0057	-0.0103	-0.0154	0.008218
52.	17.	5.45	0.28	110.12	20.13	0.00	1.0594	0.0445	0.9793	0.4063	0.1989	0.0091	-0.0226	-0.0390	0.008043
53.	1.	5.40	0.28	110.07	-2.05	0.00	0.0479	0.0144	0.0483	0.0127	0.0148	0.0000	-0.0002	-0.0001	0.007388
53.	2.	5.37	0.28	108.92	0.00	0.00	0.1113	0.0153	0.1113	0.0153	0.0178	-0.0002	-0.0003	0.0002	0.007542
53.	3.	5.38	0.28	109.85	2.07	0.00	0.1819	0.0147	0.1812	0.0213	0.0206	-0.0005	-0.0003	0.0007	0.007372
53.	4.	5.38	0.28	109.85	3.01	0.00	0.2165	0.0139	0.2155	0.0252	0.0219	-0.0005	-0.0003	0.0006	0.007358
53.	5.	5.39	0.28	110.20	4.02	0.00	0.2555	0.0128	0.2539	0.0307	0.0229	-0.0003	-0.0004	0.0002	0.007150
53.	6.	5.38	0.28	110.09	4.58	0.00	0.2772	0.0121	0.2753	0.0342	0.0235	-0.0003	-0.0005	-0.0001	0.007207
53.	7.	5.38	0.28	110.09	5.06	0.00 0.00	0.2964 0.3157	0.0116 0.0110	0.2942 0.3131	0.0377 0.0414	0.0243 0.0250	-0.0002 -0.0005	-0.0005 -0.0006	-0.0002 -0.0002	0.007097 0.007044
53. 53.	8. 9.	5.38 5.36	0.28 0.28	110.32 109.98	5.55 6.09	0.00	0.3394	0.0110	0.3363	0.0466	0.0257	-0.0005	-0.0008	-0.0004	0.006970
53.	10.	5.37	0.28	110.11	6.99	0.00	0.3876	0.0136	0.3833		0.0258	0.0001	-0.0011	0.0001	0.006856
53.	11.	5.36	0.28	110.36	8.06	0.00	0.4364	0.0155	0.4299	0.0765	0.0388	-0.0017	-0.0011	0.0005	0.007041
53.	12.	5.35	0.28	110.03	9.15	0.00	0.4869	0.0196	0.4776	0.0968	0.0571	0.0001	-0.0013	-0.0015	0.007050
53.	13.	5.34	0.28	109.82	10.11	0.00	0.5355	0.0233	0.5231	0.1170	0.0710	-0.0010	-0.0012	-0.0003	0.007174
53.	14.	5.35	0.28	110.33	12.17	0.00	0.6380	0.0280	0.6178	0.1619	0.0950	0.0005	-0.0035	-0.0056	0.007165
53.	15.	5.35	0.28	110.44	16.02	0.00	0.8365	0.0367	0,7939	0.2662	0.1452	0.0050	-0.0097	-0.0140	0.007073
53.	16.	5.34	0.28	109.88	20.06	0.00	1.0555	0.0454	0.9759	0.4047	0.1999	0.0092	-0.0219	-0.0359	0.006860
54.	1.	5.31	0.28	110.30	-2.05	0.00	0.0490	0.0147	0.0495	0.0129	0.0146	0.0000	-0.0002	-0.0008	0.006401
54.	2.	5.29	0.28	109.61	-0.07	0.00	0.1103	0.0156	0.1103	0.0154	0.0174	-0.0004	-0.0003	-0.0009	0.006298
54.	3.	5.31	0.28	110.88	2.03	0.00	0.1823	0.0150		0.0215	0.0203	-0.0006	-0.0002	-0.0001	0.006175
54.	4.	5.32	0.28	111.12	3.07	0.00	0.2207	0.0142		0.0260	0.0218	-0.0006	-0.0003	-0.0002 -0.0005	0.006165
54. 54.	5. 6.	5.29 5.29	0.28 0.28	110.08 110.20	4.06 4.51	0.00 0.00	0.2584 0.2761	0.0131 0.0126	0.2568 0.2742	0.0314 0.0343	0.0228 0.0234	-0.0004 -0.0004	-0.0004 -0.0004	-0.0008	0.006057
54.	7.	5.29	0.28	110.22	5.01	0.00	0.2965	0.0123	0.2943	0.0380	0.0234	-0.0003	-0.0005	-0.0010	0.005878
54.	8.	5.29	0.28	110.44	5.53	0.00	0.3168	0.0116	0.3142	0.0421	0.0249	-0.0006	-0.0006	-0.0010	0.005900
57.	1	5 22	0.28	110.19	-2.00	0.00	0.0508	0.0155	0.0513	0.0137	0.0146	0.0001	-0.0001	0.0000	0.002199
57.	1. 2.	5.32 5.30	0.28	110.19	-2.07	0.00	0.0308	0.0153	0.0313		0.0145	0.0001	-0.0001	0.0001	0.002077

Run	Point	R	M	q	α	β	C _N	C _A	C_L	$c_{\mathtt{D}}$	C _m	G	C _a	C _Y	C_{q}
		4.45		100.04	604	0.00	0.1115	0.0160	0.1115	0.0159	0.0175	-0.0003	-0.0002	0.0000	0.002187
57.	3.	5.27 5.29	0.28	109.04 110.08	-0.04 2.03	0.00	0.1113	0.0154	0.1801	0.0218	0.0202	-0.0005	-0.0001	0.0003	0.002242
57. 57.	4. 5.	5.29	0.28	110.31	3.05	0.00	0.2187	0.0145	0.2177	0.0262	0.0218	-0.0004	-0.0002	0.0002	0.002149
57.	6.	5.30	0.28	110.77	4.05	0.00	0.2568	0.0135	0.2552	0.0316	0.0231	-0.0001	-0.0002	0.0001	0.002058
57.	7.	5.30	0.28	110.89	4.58	0.00	0.2781	0.0131	0.2762	0.0353	0.0241	-0.0003	-0.0003	0.0001	0.002119
57.	8.	5.28	0.28	110.44	5.09	0.00	0.3020	0.0136	0.2996	0.0403	0.0257	0.0000	-0.0004	-0.0002	0.002093
57.	9.	5.27	0.28	110.10	6.06	0.00	0.3474	0.0160	0.3437 0.3905	0.0526 0.0673	0.0330 0.0422	0.0001 -0.0004	-0.0006 -0.0007	-0.0002 -0.0002	0.002005
57.	10.	5.27	0.28	110.35	7.07	0.00	0.3958 0.43 84	0.0187 0.0212	0.3905	0.0873	0.0523	-0.0003	-0.0009	-0.0002	0.002084
57.	11.	5.27	0.28	110.25	8.03 9.06	0.00 0.00	0.4854	0.0212	0.4756	0.0996	0.0637	-0.0002	-0.0011	-0.0012	0.002126
57. 57.	12. 13.	5.27 5.26	0.28 0.28	110.73 110.52	10.04	0.00	0.5323	0.0255	0.5197	0.1179	0.0737	0.0000	-0.0017	-0.0021	0.002122
57.	14.	5.25	0.28	110.33	12.08	0.00	0.6334	0.0298	0.6131	0.1616	0.0965	0.0008	-0.0037	-0.0064	0.002114
57.	15.	5.24	0.28	109.86	16.07	0.00	0.8368	0.0383	0.7935	0.2684	0.1480	0.0062	-0.0104	-0.0156	0.001994
57.	16.	5.25	0.28	110.58	20.01	0.00	1.0569	0.0477	0.9768	0.4065	0.2013	0.0107	-0.0206	-0.0289	0.001872
_												0.0000	0.0002	0.0000	0.000000
58.	3.	2.48	0.12	19.79	-6.02	0.00	-0.0762	0.0157	-0.0742	0.0237	0.0036	-0.0007 -0.0004	0.0003	0.0029 0.0025	0.000000
58.	4.	2.48	0.12	19.90	-5.06	0.00	-0.0406	0.0166 0.0173	-0.0390 -0.0075	0.0201 0.0179	0.0065 0.0069	-0.0004	0.0003	0.0020	0.000000
58.	5.	2.49	0.12	20.13	-4.09 3.04	0.00 0.00	-0.0088 0.0234	0.0173	0.0244	0.0179	0.0120	-0.0001	0.0001	0.0015	0.000000
58.	6.	2.50	0.12 0.12	20.24 20.13	-3.04 -2.01	0.00	0.0234	0.0187	0.0532	0.0169	0.0146	-0.0001	0.0001	0.0002	0.000000
58. 58.	7. 8.	2.49 2.49	0.12	20.13	-1.08	0.00	0.0799	0.0188	0.0802	0.0173	0.0161	-0.0002	0.0000	-0.0001	0.000000
58.	9.	249	0.12	20.13	-0.03	0.00	0.1095	0.0187	0.1095	0.0186	0.0171	-0.0002	-0.0001	-0.0012	0.000000
58.	10.	2.49	0.12	20.13	2.04	0.00	0.1791	0.0176	0.1784	0.0239	0.0201	-0.0004	0.0000	-0.0012	0.000000
58.	11.	2.48	0.12	20.02	4.02	0.00	0.2535	0.0157	0.2518	0.0334	0.0234	-0.0005	-0.0003	-0.0023	0.000000
58.	12.	2.48	0.12	20.02	6.10	0.00	0.3501	0.0191	0.3461	0.0562	0.0357	0.0002	-0.0006	-0.0046 -0.0049	0.000000
58.	13.	2.50	0.12	20.37	8.04	0.00	0.4349	0.0223	0.4275	0.0829	0.0571 0.0753	-0.0002 0.0006	-0.0011 -0.0018	-0.0069	0.000000
58.	14.	2.47	0.12	19.91	10.03	0.00	0.5278 0.6279	0.0250 0.0280	0.5154	0.1165 0.1587	0.0753	0.0000	-0.0018	-0.0094	0.000000
58.	15.	2.48	0.12	20.15	12.08 14.06	0.00	0.0279	0.0309	0.7062	0.2087	0.1176	0.0031	-0.0053	-0.0140	0.000000
58. 58.	16. 17.	2.48 ·2.47	0.12 0.12	20.04 19.94	16.07	0.00	0.8431	0.0342	0.8007	0.2663	0.1448	0.0058	-0.0075	-0.0171	0.000000
58.	17.	2.48	0.12	20.06	18.04	0.00	0.9505	0.0374	0.8922	0.3299	0.1712	0.0105	-0.0148	-0.0285	0.000000
58.	19.	2.47	0.12	19.96	20.01	0.00	1.0633	0.0405	0.9852	0.4019	0.2004	0.0106	-0.0229	-0.0475	0.000000
														A 0011	A 000000
59.	1.	3.87	0.19	49.92	-6.07	0.00	-0.0902	0.0100	-0.0887	0.0195	0.0035	-0.0004	0.0001 0.0001	0.0011 0.0012	0.000000
59.	2.	3.86	0.19	49.80	-5.05	0.00	-0.0505	0.0114	-0.0493	0.0158	0.0066	-0.0002 0.0001	0.0001	0.0012	0.000000
59.	3.	3.87	0.19	50.15	-4.04	0.00	-0.0147 0.0169	0.0126 0.0139	-0.013 8 0.0176	0.0136 0.0130	0.0031	0.0001	0.0000	0.0001	0.000000
59.	4.	3.88	0.19	50.38 50.03	-3.04 -2.08	0.00	0.0109	0.0139	0.0175	0.0129	0.0147	0.0000	0.0000	0.0003	0.000000
59.	5. 6.	3.86 3.85	0.19	49.92	-2.05	0.00	0.0779	0.0151	0.0781	0.0136	0.0164	-0.0001	0.0000	0.0001	0.000000
59. 59.	7.	3.86	0.19	50.15	0.01	0.00	0.1110	0.0151	0.1110	0.0151	0.0177	-0.0003	-0.0001	0.0001	0.000000
59.	8.	3.87	0.19	50.38	2.02	0.00	0.1803	0.0143	0.1797	0.0207	0.0207	-0.0004	-0.0001	0.0006	0.000000
59.	9.	3.85	0.19	50.04	4.03	0.00	0.2567	0.0125	0.2552	0.0305	0.0237	-0.0002	-0.0002	0.0000	0.000000
59.	10.	3.85	0.19	50.05	6.10	0.00	0.3530	0.0153	0.3494	0.0527	0.0338	-0.0005	-0.0004	-0.0019	0.000000
59.	11.	3.85	0.19	50.29	8.07	0.00	0.4431	0.0199	0.4359	0.0819	0.0540	-0.0006 0.0002	-0.0007 -0.0018	-0.0012 -0.0034	0.000000
59.	12.	3.85	0.19	50.19	10.02	0.00	0.5351	0.0234	0.5228	0.1162 0.1600	0.0744 0.0958	0.0002	-0.0017	-0.0064	0.000000
59.	13.	3.85	0.19	50.32	12.06	0.00	0.6390 0.7419	0.0271 0.0315	0.6192 0.7121	0.2107	0.1233	0.0015	-0.0062	-0.0090	0.000000
59.	14.	3.84 3.83	0.19 0.19	50.11 50.14	14.05 16.02	0.00	0.7419	0.0356	0.8010	0.2669	0.1496	0.0053	-0.0088	-0.0113	0.000000
59. 59.	15. 16.	3.82		49.94	18.04	0.00	0.9570	0.0396	0.8977	0.3340	0.1767	0.0084	-0.0136	-0.0177	0.000000
59.		3.82		49.97	20.06	0.00	1.0669	0.0435	0.9873	0.4068	0.2044	0.0110	-0.0193	-0.0277	0.000000
	•													0.0001	0.000000
60.	1.	5.55	0.28		-6.09	0.00	-0.0913	0.0081	-0.0900	0.0177	0.0037	-0.0004	-0.0001	0.0001 -0.0002	0.000000
60.		5.53			-5.02	0.00	-0.0488	0.0098	-0.0477	0.0140	0.0067 0.0090	-0.0001 0.0001	-0.0001 -0.0001	-0.0002	0.000000
60.		5.53			-4.04 2.05	0.00	-0.0149	0.0113 0.0127	-0.0140 0.0179	0.0123 0.0117	0.0090	0.0001	-0.0001	-0.0003	0.000000
60.		5.52			-3.05	0.00	0.0172 0.0491	0.0127	0.0179		0.0147	0.0001	-0.0001	-0.0002	0.000000
60.	<u>5.</u> 6.	5.51 5.49			-2.02 -1.03	0.00	0.0793	0.0137	0.0795	0.0129	0.0164	-0.0002	-0.0001	-0.0004	0.000000
60. 60.		5.49			0.03	0.00	0.1117	0.0146	0.1117	0.0146	0.0178	-0.0003	-0.0002	0.0000	0.000000
60.		5.47			2.09	0.00	0.1826	0.0137	0.1819	0.0203	0.0209	-0.0004	-0.0001	0.0012	0.000000
60.		5.46			4.00	0.00	0.2551	0.0120	0.2536		0.0239	-0.0001	-0.0003	0.0008	0.000000
60.		5.46			6.06	0.00	0.3504	0.0148	0.3469	0.0517	0.0327	-0.0008	-0.0005	0.0000	0.000000
60.		5.46			8.08	0.00	0.4413	0.0201	0.4341	0.0820	0.0554 0.0746	-0.0010 -0.0008	-0.0004 -0.0011	0.0018 0.0005	0.000000
60.		5.45			10.00	0.00	0.5315	0.0237	0.5193 0.6153	0.1156 0.1605	0.0746	-0.0001	-0.0011	-0.0028	0.000000
60.		5.44			12.03	0.00 0.00	0.6352 0.7348	0.0288 0.0321	0.7052		0.1208	0.0017		-0.0063	0.000000
60.	14.	5.43	0.28	109.80	14.01	0.00	V. 1 240	5.0341	J						

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Run	Point	R	M	q	α	β	_± C _N	C _A	C_{L}	c_{D}	_ C _{m.} ;	, G	C _n	$C_{\mathbf{Y}}$	$C_{\mathbf{q}}$
						rith i E	. S				-# · · · · · · · · · · · · · · · · · · ·	ę 1		_	•
60.	15.	5.43	0.28	109.86	16.04	0.00	0.8378	0.0366	0.7951	0.2667	0.1480	0.0048	-0.0094	-0.0125	0.000000
60.	16.	5.43	0.28	110.16	18.08	0.00	0.9466	0.0405	0.8873	0.3323	0.1744	0.0079	-0.0159	-0.0229	0.000000
60.	17.	5.44	0.28	110.69	20.15	0.00	1.0625	0.0447	0.9821	0.4080	0.2013	0.0098	-0.0227	-0.0376	0.000000
62	•	2.42	0.10	20.40	2.00	0.00	0.0400								
63. 63.	3. 4.	2.43 2.40			-2.00 0.01	0.00 0.00	0.0488 0.1109	0.0234	0.0496	0.0216	0.0135	0.0001	-0.0007	0.0016	0.023297
63.	5.	2.39	0.12		2.05	0.00	0.1109	0.0242	0.1109 0.1817	0.0242 0.0304	0.0160 0.0190	-0.0002	-0.0008	0.0007	0.023889
63.	6.	2.39	0.12		3.09	0.00	0.1827	0.0239	0.1817	0.0350	0.0190	-0.0003 -0.0004	-0.0008 -0.0009	0.0005 -0.0003	0.023946
63.	7.	2.39	0.12		4.01	0.00	0.2591	0.0222	0.2569	0.0403	0.0205	-0.0002	-0.0010	-0.0005	0.023861
63.	8.	2.39	0.12	20.02	4.58	0.00	0.2794	0.0211	0.2768	0.0433	0.0215	-0.0001	-0.0011	-0.0013	0.023775
63.	9.	2.39	0.12		5.01	0.00	0.2969	0.0203	0.2940	0.0462	0.0222	0.0002	-0.0012	-0.0013	0.023748
63.	10.	2.38	0.12		5.55	0.00	0.3198	0.0194	0.3164	0.0502	0.0225	0.0001	-0.0013	-0.0019	0.023750
63.	11.	2.38	0.12	19.91	6.04	0.00	0.3387	0.0184	0.3349	0.0539	0.0232	-0.0002	-0.0014	-0.0029	0.023738
63.	12.	2.39	0.12	20.02	7.03	0.00	0.3703	0.0162	0.3655	0.0614	0.0269	-0.0001	-0.0017	-0.0036	0.023574
63. 63.	13. 14.	2.39 2.38	0.12 0.12	20.02 19.91	8.08 9.03	0.00 0.00	0.4069 0.4439	0.0141	0.4009	0.0712	0.0301	- 0.0003	-0.0020	-0.0047	0.023463
63.	15.	2.38	0.12	19.91	10.05	0.00	0.4957	0.0125 0.0123	0.4364	0.0821	0.0337 0.0345	0.0005	-0.0022	-0.0060	0.023375
63.	16.	2.38	0.12	19.92	12.03	0.00	0.5935	0.0208	0.5762	0.1440	0.0663	0.0017 0.0024	-0.0026 -0.0041	-0.0079 -0.0168	0.023365 0.023420
63.	17.	2.38	0.12	19.83	16.05	0.00	0.8387	0.0343	0.7965	0.2649	0.1217	0.0013	-0.0051	-0.0099	0.023727
63.	18.	2.38	0.12	19.97	20.05	0.00	1.0594	0.0472	0.9790	0.4075	0.1948	0.0081	-0.0217	-0.0430	0.023599
												•			
64.	1.	3.73	0.19	49.58	-2.05	0.00	0.0479	0.0174	0.0485	0.0157	0.0143	0.0001	-0.0004	0.0001	0.015118
64.	2.	3.73	0.19	49.58	-0.06	0.00	0.1096	0.0180	0.1096	0.0179	0.0171	-0.0002	-0.0005	-0.0002	0.015040
64. 64.	3. 4.	3.74 3.73	0.19 0.19	50.04 50.04	2.07 3.01	0.00	0.1832	0.0170	0.1825	0.0236	0.0199	-0.0003	-0.0004	-0.0002	0.014925
64.	5 .	3.72	0.19	49.81	4.05	0.00 0.00	0.2172 0.2574	0.0161 0.0148	0.2161 0.2557	0.0275 0.0330	0.0211	-0.0004	-0.0005	-0.0002	0.014777
64.	6.	3.73	0.19	50.16	4.49	0.00	0.2733	0.0148	0.2337	0.0355	0.0220	-0.0002 -0.0002	-0.0006 -0.0006	-0.0009 -0.0007	0.014717
64.	7.	3.72	0.19	50.04	5.02	0.00	0.2939	0.0142	0.2715	0.0391	0.0222	0.0002	-0.0007	-0.0007	0.014704 0.014589
64.	8.	3.73	0.19	50.16	5.50	0.00	0.3128	0.0129	0.3101	0.0428	0.0237	-0.0002	-0.0007	-0.0011	0.014504
64.	9.	3.72	0.19	50. 05	6.04	0.00	0.3352	0.0120	0.3321	0.0472	0.0245	-0.0003	-0.0009	-0.0017	0.014486
64.	10.	3.72	0.19	50.05	7.04	0.00	0.3704	0.0103	0.3663	0.0556	0.0281	-0.0003	-0.0012	-0.0027	0.014380
64.	11.	3.72	0.19	50.17	8.03	0.00	0.4134	0.0097	0.4080	0.0674	0.0308	-0.0003	-0.0015	-0.0030	0.014152
64.	12.	3.72	0.19	50.06	9.07	0.00	0.4757	0.0115	0.4680	0.0863	0.0304	0.0014	-0.0020	-0.0027	0.014101
64. 64.	13. 14.	3.71 3.71	0.19 0.19	49.96 49.98	10.03 12.07	0.00	0.5179	0.0158	0.5072	0.1058	0.0485	-0.0003	-0.0023	-0.0017	0.014308
64.	15.	3.71	0.19	49.91	15.99	0.00 0.00	0.6218 0.8374	0.0220 0.0365	0.6035 0.7950	0.1515 0.2658	0.0749	0.0023	-0.0043	-0.0107	0.014127
64.	16.	3.72	0.19	50.44	20.05	0.00	1.0628	0.0303	0.9822	0.4085	0.1420 0.2003	0.0053 0.0086	-0.0082 -0.0150	-0.0118 -0.0232	0.014578
							1.0020	0.0471	0.7022	0.4003	0.2003	0.0000	-0.0150	-0.0232	0.014154
65.	1.	5.43	0.28	110.19	-2.07	0.00	0.0467	0.0152	0.0472	0.0135	0.0144	0.0001	-0.0002	-0.0005	0.009870
65.	2.	5.39	0.28	109.50	-0.01	0.00	0.1124	0.0160	0.1124	0.0160	0.0176	-0.0003	-0.0003	-0.0006	0.009744
65.	3.	5.38	0.28	109.74	2.02	0.00	0.1805	0.0153	0.1799	0.0216	0.0202	-0.0005	-0.0003	0.0001	0.009652
65.	4. -	5.40	0.28	110.66	3.09	0.00	0.2197	0.0143	0.2186	0.0261	0.0218	-0.0005	-0.0003	0.0002	0.009502
65. 65.	5. 6.	5.38 5.37	0.28 0.28	110.43 109.97	4.00 4.52	0.00	0.2541	0.0133	0.2526	0.0310	0.0227	-0.0002	-0.0004	0.0003	0.009403
65.	7.	5.36	0.28	109.86	5.04	0.00 0.00	0.2747 0.2949	0.0126 0.0121	0.2729 0.2927	0.0343 0.0380	0.0232	-0.0003	-0.0005	0.0000	0.009342
65.	8.	5.36	0.28	110.09	5.50	0.00	0.3127	0.0121	0.2927	0.0380	0.0241 0.0248	-0.0001 -0.0002	-0.0005 -0.0006	-0.0001 -0.0002	0.009160 0.009167
65.	9.	5.35	0.28	110.21	6.06	0.00	0.3347	0.0108	0.3317	0.0461	0.0255	-0.0002	-0.0007	-0.0002	0.009167
65.	10.	5.35	0.28	110.11	7.07	0.00	0.3848	0.0110	0.3805	0.0582	0.0264	-0.0002	-0.0011	-0.0002	0.008861
65.	11.	5.33	0.28	109.43	8.01	0.00	0.4320	0.0138	0.4259	0.0738	0.0329	-0.0016	-0.0013	0.0010	0.008979
65.	12.	5.34	0.28	110.26	9.07	0.00	0.4769	0.0181	0.4681	0.0930	0.0511	0.0007	-0.0013	-0.0029	0.008887
65.	13.	5.33	0.28	110.28	10.05	0.00	0.5254	0.0207	0.5137	0.1121	0.0621	0.0002	-0.0020	-0.0036	0.008852
65. 65.	14. 15.	5.33 5.31	0.28 0.28	110.45 110.33	12.10	0.00	0.6304	0.0283	0.6105	0.1598	0.0931	0.0006	-0.0031	-0.0041	0.009287
65.	16.	5.31	0.28	110.35	16.07 20.02	0.00 0.00	0.8375	0.0387	0.7941	0.2690	0.1481	0.0055	-0.0100	-0.0147	0.009093
JU.		1	J.20	110.33	20.02	0.00	1.0594	0.0490	0.9787	0.4086	0.2021	0.0106	-0.0208	-0.0300	0.008826
66.	3.	2.35	0.12	20.01	-2.05	0.00	0.0473	0.0231	0.0481	0.0213	0.0143	-0.0001	0.0000	0.0015	0.000000
66.	4.	2.35	0.12	20.01	0.01	0.00	0.1134	0.0237	0.1133	0.0237	0.0174	-0.0003	-0.0002	0.0007	0.000000
66.	5.	2.35	0.12	20.01	2.10	0.00	0.1861	0.0238	0.1851	0.0306	0.0206	-0.0005	-0.0002	0.0009	0.000000
66.	6.	2.35	0.12	20.01	3.07	0.00	0.2234	0.0236	0.2218	0.0356	0.0223	-0.0006	-0.0004	-0.0005	0.000000
66. 66	7.	2.35	0.12	20.02	4.02	0.00	0.2614	0.0234	0.2591	0.0416	0.0241	-0.0005	-0.0004	-0.0012	0.000000
66. 66.	8. 9.	2.35 2.35	0.12 0.12	20.02 20.02	4.49 5.03	0.00	0.2845	0.0241	0.2818	0.0463	0.0256	-0.0002	-0.0005	-0.0013	0.000000
66.	10.	236	0.12	20.02	5.03 5.50	0.00 0.00	0.3124 0.3353	0.0257 0.0278	0.3090 0.3311	0.0530 0.0598	0.0295	-0.0003	-0.0007	-0.0023	0.000000
66.	11.	2.36	0.12	20.14	6.00	0.00	0.3572	0.0278	0.3522	0.0662	0.0346 0.0393	-0.0008 -0.0008	-0.0007 -0.0006	-0.0017 -0.0017	0.000000
66.	12.	2.36	0.12	20.14	7.08	0.00	0.4037	0.0230	0.3968	0.0806	0.0393	-0.0006	-0.0010	-0.0017	0.000000
															

Run	Point	R	M	q	OL -	β	C _N	C _A	C_L	C_{D}	C _m	G	C_{2}	C_{Y}	$C_{\mathbf{q}}$
				_											
										_					
66.	13.	2.35	0.12	20.02	8.02	0.00	0.4478	0.0325	0.4388	0.0947	0.0571	-0.0005	-0.0013	-0.0041	0.000000
66.	14.	2.35	0.12	19.91	9.03	0.00	0.4963	0.0342	0.4847	0.1116	0.0662	-0.0002	-0.0017 -0.0020	-0.0045 -0.0054	0.000000
66.	15.	2.35	0.12	20.03	10.09	0.00	0.5431	0.0353	0.5285	0.1299	0.0759	0.0002 0.0007	-0.0020	-0.0095	0.000000
66.	16.	2.35	0.12	19.92	12.03	0.00	0.6405	0.0384	0.6184 0.7954	0.1710 0.2748	0.0965 0.1428	0.0007	-0.0064	-0.0149	0.000000
66.	17.	2.36	0.12	20.06	16.02	0.00	0.8404	0.0447 0.0521	0.7934	0.4168	0.2010	0.0097	-0.0226	-0.0473	0.000000
66.	18.	2.34	0.12	19.85	20.04	0.00	1.0735	0.0521	0.5500	0.4106	0.2010	0.0071	0.0220	•••	•
		2.72	0.10	50.38	-2.04	0.00	0.0497	0.0176	0.0503	0.0158	0.0147	0.0000	-0.0002	-0.0004	0.000000
67. 67.	1. 2.	3.72 3.71	0.19 0.19	50.26	-0.01	0.00	0.1132	0.0184	0.1132	0.0184	0.0176	-0.0002	-0.0002	-0.0008	0.000000
67.	3.	3.71	0.19	50.26	2.04	0.00	0.1830	0.0178	0.1823	0.0243	0.0206	-0.0005	-0.0002	-0.0003	0.000000
67.	J. 4.	3.70	0.19	50.04	3.06	0.00	0.2209	0.0171	0.2197	0.0288	0.0222	-0.0004	-0.0003	-0.0007	0.000000
67.	5.	3.70	0.19	50.04	4.09	0.00	0.2610	0.0164	0.2592	0.0350	0.0237	-0.0004	-0.0004	-0.0009	0.000000
67.	6.	3.70	0.19	50.15	4.50	0.00	0.2785	0.0166	0.2763	0.0384	0.0250	-0.0003	-0.0005	-0.0008	0.000000
67.	7.	3.70	0.19	50.16	5.05	0.00	0.3070	0.0178	0.3042	0.0448	0.0269	-0.0005	-0.0005	-0.0010	0.000000
67.	8.	3.70	0.19	50.16	5.49	0.00	0.3271	0.0189	0.3237	0.0501	0.0313	-0.0005	-0.0005	-0.0014	0.000000
67.	9.	3.70	0.19	50.16	6.09	0.00	0.3548	0.0202	0.3507	0.0577	0.0362	-0.0007	-0.0006	-0.0009	0.000000
67.	10.	3.71	0.19	50.28	7.06	0.00	0.3974	0.0228	0.3916	0.0715	0.0472	-0.0006	-0.0007	-0.0015	0.000000
67.	11.	3.71	0.19	50.41	8.00	0.00	0.4383	0.0244	0.4306	0.0852	0.0560	-0.0004	-0.0011	-0.0027	0.000000
67.	12.	3.70	0.19	50.18	9.02	0.00	0.4873	0.0264	0.4771	0.1024	0.0659 0.0754	-0.0002 0.0002	-0.0014 -0.0018	-0.0029 -0.0033	0.000000
67.	13.	3.69	0.19	49.96	10.01	0.00	0.5350 0.6370	0.0280 0.0316	0.5220 0.6164	0.1205 0.1637	0.0754	0.0002	-0.0015	-0.0071	0.000000
67.	14.	3.70	0.19	50.09	12.04	0.00 0.00	0.8370	0.0394	0.8031	0.2728	0.1488	0.0063	-0.0087	-0.0143	0.000000
67.	15.	3.68	0.19	49.68 50.09	16.09 20.01	0.00	1.0618	0.0394	0.9813	0.4084	0.2010	0.0090	-0.0153	-0.0244	0.000000
67.	16.	3.69	0.19	30.0 3	20.01	Ų. 00	1.0010	0.0400	0.7013	0.4004	0.2010	0.0032	0.0100		
68.	1.	5.41	0.28	110.07	-2.06	0.00	0.0477	0.0151	0.0482	0.0134	0.0148	0.0001	-0.0001	-0.0002	0.000000
68.	1. 2.	5.36	0.28	108.69	-0.05	0.00	0.1102	0.0160	0.1102	0.0159	0.0179	-0.0003	-0.0003	-0.0002	0.000000
68.	3.	5.35	0.28	108.70	2.03	0.00	0.1800	0.0154	0.1794	0.0217	0.0208	-0.0005	-0.0002	0.0002	0.000000
68.	4.	5.36	0.28	109.62	3.03	0.00	0.2168	0.0145	0.2157	0.0260	0.0224	-0.0005	-0.0002	0.0002	0.000000
68.	5.	5.37	0.28	110.31	4.04	0.00	0.2558	0.0138	0.2542	0.0318	0.0241	-0.0003	-0.0004	0.0002	0.000000
68.	6.	5.37	0.28	110.20	4.46	0.00	0.2744	0.0140	0.2725	0.0354	0.0252	-0.0003	-0.0004	0.0004	0.000000
68.	7.	5.36	0.28	109.98	5.09	0.00	0.3047	0.0153	0.3021	0.0423	0.0285	-0.0003	-0.0005	0.0003	0.000000
68.	8.	5.36	0.28	110.21	5.52	0.00	0.3258	0.0164	0.3227	0.0477	0.0315	-0.0003	-0.0006	0.0003	0.000000
68.	9.	5.35	0.28	109.76	6.00	0.00	0.3472	0.0175	0.3435	0.0537	0.0351	-0.0005	-0.0005	0.0003 -0.0005	0.000000
68.	10.	5.35	0.28	110.35	7.04	0.00	0.3938	0.0199	0.3884	0.0680	0.0447	-0.0003 -0.0004	-0.0007 -0.0009	-0.0008	0.000000
68.	11.	5.35	0.28	110.37	8.04	0.00	0.4380	0.0220 0.0237	0.4306 0.4719	0.0830 0.0986	0.0547 0.0641	-0.0003	-0.0012	-0.0010	0.000000
68.	12.	5.34	0.28	110.27	8.99	0.00	0.4815 0.5311	0.0257	0.5185	0.0330	0.0758	0.0003	-0.0018	-0.0023	0.000000
68.	13.	5.33	0.28 0.28	110.17 110.33	10.03 12.04	0.00	0.6319	0.0299	0.6118	0.1611	0.0980	0.0006	-0.0035	-0.0058	0.000000
68. 68.	14. 15.	5.34 5.31	0.28	109.51	16.01	0.00	0.8321	0.0385	0.7892	0.2666	0.1491	0.0057	-0.0098	-0.0146	0.000000
68.	16.	5.32	0.28	110.47	20.10	0.00	1.0585	0.0484	0.9774	0.4092	0.2048	0.0101	-0.0228	-0.0350	0.000000
00.	10.	J.J.	0.20												
69.	2.	3.73	0.19	49.92	-2.02	5.00	0.0470	0.0176	0.0476	0.0159	0.0106	-0.0013	-0.0049	-0.0056	0.013748
69.	3.	3.73	0.19	50.04	-0.07	5.00	0.1105	0.0182	0.1105	0.0181	0.0142	-0.0027	-0.0051	-0.0081	0.013688
6 9 .	4.	3.73	0.19	50.15	2.08	5.00	0.1866	0.0163	0.1859	0.0231	0.0172	-0.0039	-0.0044	-0.0091	0.013508
69.	5.	3.73	0.19	50.27	3.09	5.00	0.2236	0.0155	0.2224	0.0275	0.0178	-0.0045	-0.0047	-0.0103	0.013450
69 .	6.	3.74	0.19	50.39	4.00	5.00	0.2582	0.0145	0.2566	0.0325	0.0187	-0.0052	-0.0051	-0.0110	0.013217
69.	7.	3.74	0.19	50.39	4.52	5.00	0.2793	0.0139	0.2773	0.0359	0.0194	-0.0056	-0.0054	-0.0117 -0.0124	0.013276 0.0131 8 7
69 .	8.	3.74	0.19	50.39	5.06	5.00	0.3011	0.0134	0.2987	0.0399	0.0202	-0.0059	-0.0057 -0.0060	-0.0124	0.013110
69.	9.	3.74	0.19	50.50	5.50	5.00	0.3192	0.0129	0.3165	0.0435	0.0211 0.0223	-0.0059 -0.0056	-0.0066	-0.0123	0.013112
69.	10.	3.74	0.19	50.51	6.07	5.00	0.3428 0.3857	0.0127 0.0140	0.3395 0.3811	0.0489 0.0611	0.0223	-0.0034	-0.0083	-0.0033	0.013222
69.	11.	3.74	0.19	50.51	7.04	5.00 5.00	0.3837	0.0140	0.4227	0.0755	0.0233	-0.0125	-0.0080	0.0056	0.013353
69.	12.	3.74	0.19	50.52 50.29	8.02 9.01	5.00	0.4291	0.0158	0.4603	0.0899	0.0533	-0.0144	-0.0076	0.0119	0.013519
69.	13.	3.73	0.19	50.19	10.03	5.00	0.5160	0.0173	0.5051	0.1069	0.0602	-0.0159	-0.0074	0.0136	0.013559
69. 69.	14. 15.	3.73 3.73	0.19 0.19	50.19	12.04	5.00	0.6214	0.0211	0.6033	0.1503	0.0765	-0.0177	-0.0073	0.0077	0.013514
69.	15. 16.	3.73	0.19	50.02	16.03	5.00	0.8177	0.0309	0.7774	0.2554	0.1325	-0.0132	-0.0138	-0.0143	0.013355
69.	17.	3.71	0.18	49.51	20.01	5.00	1.0629	0.0413	0.9846	0.4026	0.1842	-0.0217	-0.0235	-0.0292	0.013277
07.	1,,	J., A	7.10												
70.	1.	3.73	0.19	50.15	-2.05	-5.00	0.0410	0.0169	0.0416	0.0154	0.0116	0.0022	0.0040	0.0090	0.013837
70.	2.	3.73	0.19	50.27	0.10	-5.00	0.1102	0.0174	0.1102	0.0176	0.0153	0.0041	0.0039	0.0093	0.013876
70.	3.	3.73	0.19	50.38	2.06	-5.00	0.1777	0.0167	0.1769	0.0231	0.0180	0.0055	0.0034	0.0090	0.013732
70.	4.	3.74	0.19	50.38	3.03	-5.00	0.2148	0.0161	0.2137	0.0274	0.0188	0.0060	0.0036	0.0094	0.013604 0.013567
70.	5.	3.73	0.19	50.39	4.04	-5.00	0.2536	0.0149	0.2519	0.0328	0.0197	0.0067 0.0068	0.0038 0.0040	0.0104 0.0108	0.013519
70.	6.	3.74	0.19	50.39	4.48	-5.00	0.2713	0.0144	0.2693	0.0356	0.0202 0.0213	0.0068	0.0040	0.0108	0.013319
· 70.	7.	3.73	0.19	50.27	5.08	-5.00	0.2951	0.0138	0.2927	0.0399	U.UZ13	V.JU/ 1	VV-1	V.011	0.0.0

Run	Point	R	M	q	α	β	C _N	C _A	c_L	c_{D}	C _m	G	C _n	C _Y	C _q
70.	8.	3.74	0.19	50.39	5.58	-5.00	0.3135	0.0132	0.3107	0.0436	0.0226	0.0073	0.0043	0.0122	0.013371
70.	9.	3.74	0.19	50.39	6.00	-5.00	0.3299	0.0127	0.3268	0.0471	0.0234	0.0073	0.0045	0.0123	0.013392
70.	10.	3.74	0.19	50.28	7.06	-5.00	0.3741	0.0123	0.3697	0.0581	0.0256	0.0068	0.0053	0.0125	0.013192
70.	11.	3.74	0.19	50.40	8.05	-5.00	0.4155	0.0149	0.4093	0.0729	0.0390	0.0105	0.0066	0.0028	0.013060
70.	12.	3.75	0.19	50.64	9.06	-5.00	0.4575	0.0152	0.4494	0.0870	0.0460	0.0120	0.0069	-0.0006	0.012763
70.	13.	3.73	0.19	50.18	10.03	-5.00	0.5067	0.0163	0.4961	0.1043	0.0515	0.0141	0.0063	-0.0034	0.012856
70.	14.	3.73	0.19	50.09	12.03	-5.00	0.6072	0.0235	0.5890	0.1495	0.0816	0.0154	0.0035	-0.0074	0.012999
70.	15.	3.74	0.19	50.48	16.03	-5.00	0.8066	0.0336	0.7659	0.2551	0.1368	0.0210	-0.0028	-0.0200	0.012717
70.	16.	3.72	0.19	49.74	20.04	-5.00	1.0117	0.0463	0.9346	0.3901	0.2059	0.0311	-0.0166	-0.0420	0.013125
71.	1.	3.73	0.19	50.17	4.09	-15.00	0.2388	0.0152	0.2371	0.0322	0.0340	0.0224	0.0189	0.0577	0.013784
71.	2.	3.74	0.19	50.39	4.10	-12.00	0.2491	0.0177	0.2471	0.0355	0.0352	0.0196	0.0131	0.0407	0.013637
71.	, 3.	3.74	0.19	50.50	4.07	-9.00	0.2490	0.0150	0.2473	0.0326	0.0269	0.0127	0.0094	0.0372	0.013589
71.	4.	3.74	0.19	50.39	4.04	-6.02	0.2470	0.0143	0.2453	0.0316	0.0196	0.0077	0.0046	0.0254	0.013594
71.	5.	3.73	0.19	50.16	4.04	-3.99	0.2509	0.0147	0.2493	0.0324	0.0211	0.0058	0.0027	0.0126	0.013603
71.	6.	3.73	0.19	50.16	4.04	-2.02	0.2549	0.0146	0.2532	0.0326	0.0217	0.0033	0.0013	0.0043	0.013458
71.	7.	3.73	0.19	50.04	4.04	-0.09	0.2556	0.0144	0.2539	0.0324	0.0221	0.0000	-0.0004	0.0007	0.013473
71.	8.	3.73	0.19	50.04	4.03	2.01	0.2558	0.0144	0.2542	0.0324	0.0205	-0.0027	-0.0021	-0.0030	0.013387
71.	9.	3.74	0.19	50.16	4.03	4.01	0.2574	0.0141	0.2558	0.0322	0.0189	-0.0046	-0.0038	-0.0071	0.013414
71.	10.	3.74	0.19	50.27	4.03	6.02	0.2594	0.0137	0.2578	0.0319	0.0197	-0.0064	-0.0066	-0.0129	0.013283
71.	11.	3.75	0.19	50.50	4.08	9.01	0.2725	0.0181	0.2705	0.0375	0.0342	-0.0155	-0.0107	-0.0062	0.013535
71.	12.	3.75	0.19	50.50	4.08	12.03	0.2693	0.0189	0.2672	0.0380	0.0345	-0.0206	-0.0149	-0.0122	0.013598
71.	13.	3.74	0.19	50.39	4.08	15.00	0.2648	0.0198	0.2627	0.0386	0.0373	-0.0246	-0.0180	-0.0178	0.013656
72.	1.	3.74	0.19	50.40	8.00	15.00	0.4192	0.0209	0.4122	0.0791	0.0658	-0.0377	-0.0163	0.0002	0.013633
72.	2.	3.74	0.19	50.40	7.99	11.99	0.4232	0.0191	0.4165	0.0778	0.0592	-0.0302	-0.0151	0.0019	0.013563
72.	3.	3.74	0.19	50.40	7.99	8.99	0.4263	0.0178	0.4197	0.0769	0.0566	-0.0227	-0.0119	0.0057	0.013529
72.	4.	3.74	0.19	50.29	8.00	6.01	0.4271	0.0171	0.4205	0.0763	0.0482	-0.0160	-0.0083	0.0090	0.013570
72.	5.	3.72	0.19	49.82	7.95	4.00	0.4234	0.0132	0.4176	0.0716	0.0327	-0.0081	-0.0072	0.0014	0.013356
72.	6.	3.72	0.19	49.82	7.93	1.99	0.4149	0.0104	0.4095	0.0675	0.0277	-0.0025	-0.0041	-0.0031	0.013045
72.	7.	3.72	0.19	49.82	7.93	0.04	0.4100	0.0098	0.4047	0.0663	0.0293	-0.0008	-0.0014	-0.0023	0.013083
72.	8.	3.72	0.19	49.82	8.00	-2.00	0.4149	0.0106	0.4094	0.0683	0.0296	0.0019	0.0019	0.0011	0.013137
72.	9.	3.72	0.19	49.83	8.01	-4.02	0.4136	0.0127	0.4078	0.0702	0.0330	0.0075	0.0050	0.0026	0.013139
72.	10.	3.73	0.19	50.06	8.04	-6.04	0.4056	0.0145	0.3996	0.0711	0.0412	0.0133	0.0072	0.0172	0.013111
72.	11.	3.74	0.19	50.18	8.09	-8.99	0.4099	0.0190	0.4031	0.0765	0.0566	0.0227	0.0093	0.0139	0.013132
72.	12.	3.73	0.19	49.95	8.10	-11.99	0.4044	0.0188	0,3977	0.0756	0.0598	0.0293	0.0141	0.0277	0.013224
72.	13.	3.72	0.19	49.84	8.09	-15.01	0.3904	0.0175	0.3840	0.0723	0.0590	0.0325	0.0214	0.0493	0.013361
73.	1.	3.73	0.19	49.97	12.03	-15.01	0.5484	0.0194	0.5323	0.1332	0.0902	0.0409	0.0230	0.0332	0.012738
73.	2.	3.73	0.19	50.09	12.06	-12.02	0.5767	0.0227	0.5593	0.1426	0.0931	0.0387	0.0096	-0.0047	0.012561
73.	3.	3.73	0.19	49.97	12.06	-9.02	0.5893	0.0228	0.5715	0,1454	0.0878	0.0307	0.0061	-0.0051	0.012540
73.	4.	3.73	0.19	49.98	12.05	-6.01	0.5999	0.0232	0.5819	0.1479	0.0822	0.0201	0.0030	0.0014	0.012850
73.	5.	3.72	0.19	49.86	12.04	-4.02	0.6050	0.0214	0.5872	0.1471	0.0777	0.0107	0.0019	0.0066	0.013006
73.	6.	3.73	0.19	49.86	12.04	-2.01	0.6120	0.0213	0.5940	0.1485	0.0766	0.0054	-0.0006	0.0031	0.012969
73.	7.	3.73	0.19	49.86	12.04	-0.07	0.6235	0.0222	0.6052	0.1518	0.0748	0.0028	-0.0039	-0.0075	0.013045
73.	8.	3.74	0.19	50.09	12.08	2.01	0.6254	0.0254	0.6063	0.1557	0.0856	-0.0057	-0.0042	-0.0001	0.013406
73.	9. 10	3.75	0.19	50.44	12.05	3.99	0.6222	0.0224	0.6038	0.1518	0.0765	-0.0149	-0.0048	0.0085	0.013461
73.	10.	3.75	0.19	50.55	12.06	6.00	0.6143	0.0206	0.5964	0.1485	0.0797	-0.0197	-0.0081	0.0107	0.013413
73. 73.	11. 12.	3.75 3.74	0.19 0.19	50.55 50.31	12.07	8.99	0.6085 0.5941	0.0195	0.5910	0.1464	0.0871	-0.0305 -0.0399	-0.0100	0.0183	0.013481
73. 73.	13.	3.74	0.19	50.08	12.07 12.11	12.01 15.00	0.5918	0.0197 0.0246	0.5768 0.5735	0.1435 0.1483	0.0943 0.1095	-0.0538	-0.0104 -0.0012	0.0254 0.0421	0.013580 0.013745
74.	2.	3.80	0.19	50.26	-2.03	5.00	0.0453	0.0170	0.0459	0.0154	0.0112	-0.0014	-0.0048	-0.0054	0.000000
74.	3.	3.78	0.19	49.92	-0.03	5.00	0.1113	0.0176	0.1113	0.0175	0.0152	-0.0030	-0.0049	-0.0075	0.000000
74.	4.	3.79	0.19	50.26	2.10	5.00	0.1884	0.0171	0.1876	0.0240	0.0180	-0.0044	-0.0042	-0.0076	0.000000
74.	5.	3.78	0.19	50.15	3.08	5.00	0.2310	0.0175	0.2298	0.0299	0.0201	-0.0052	-0.0052	-0.0058	0.000000
74.	6.	3.78	0.19	50.15	4.07	5.00	0.2704	0.0181	0.2684	0.0373	0.0252	-0.0073	-0.0056	-0.0024	0.000000
74.	7.	3.78	0.19	50.16	4.56	5.00	0.2902	0.0184	0.2879	0.0414	0.0281	-0.0086	-0.0058	-0.0008	0.000000
74.	8.	3.78	0.19	50.39	5.03	5.00	0.3097	0.0186	0.3069	0.0457	0.0307	-0.0096	-0.0060	0.0006	0.000000
74.	9.	3.78	0.19	50.39	5.54	5.00	0.3295	0.0187	0.3262	0.0504	0.0335	-0.0101	-0.0061	0.0019	0.000000
74.	10.	3.77	0.19	49.93	6.04	5.00	0.3505	0.0189	0.3466	0.0557	0.0366	-0.0107	-0.0064	0.0029	0.000000
74.	11.	3.78	0.19	50.28	7.07	5.00	0.3963	0.0197	0.3908	0.0683	0.0420	-0.0126	-0.0063	0.0029	0.000000
74.	12.	3.78	0.19	50.29	8.02	5.00	0.4421	0.0220	0.4347	0.0834	0.0502	-0.0133	-0.0058	-0.0003	0.000000
74.	13.	3.78	0.19	50.30	9.04	5.00	0.4886	0.0248	0.4787	0.1012	0.0622	-0.0131	-0.0059	-0.0051	0.000000
74.	14.	3.77	0.19	50.30	10.00	5.00	0.5339	0.0262	0.5213	0.1186	0.0714	-0.0139	-0.0060	-0.0052	0.000000

Run	Point	R	M	q	α	β	C _N	. C _A	C_{L}	C _D	C _m	q	C ₂	C _Y	Cq
74.	15.	3.77	0.19	50.09	12.09	5.00	0.6392	0.0290	0.6189	0.1622	0.0900	-0.0153	-0.0076	-0.0073	0.000000
74.	16.	3.76	0.19	50.02	16.04	5.00	0.8539	0.0373	0.8103	0.2718	0.1375	-0.0157	-0.0156	-0.0211	0.000000
74.	17.	3.74	0.18	49.39	20.00	5.00	1.0690	0.0445	0.9893	0.4074	0.1910	-0.0172	-0.0265	-0.0381	0.000000
75.	2.	3.88	0.19	50.03	-2.03	-5.00	0.0449	0.0193	0.0455	0.0177	0.0120	0.0023	0.0041	0.0086	0.000000
75.	3.	3.87	0.19	50.15	0.12	-5.00	0.1148	0.0199	0.1148	0.0202	0.0159	0.0041	0.0039	0.0088	0.000000
75.	4.	3.86	0.19	49.92	2.05	-5.00	0.1817	0.0192	0.1809	0.0257	0.0193	0.0058	0.0035	0.0079	0.000000
75.	5.	3.86	0.19	50.15	3.05	-5.00	0.2225	0.0193	0.2211	0.0311	0.0207	0.0063	0.0039	0.0065	0.000000
75.	6 .	3.86	0.19	50.39	4.07	-5.00	0.2647	0.0199	0.2626	0.0386	0.0248	0.0079	0.0044	0.0034	0.000000
75.	7.	3.86	0.19	50.39	4.57	-5.00	0.2838	0.0201	0.2813	0.0426	0.0270	0.0087	0.0046	0.0028	0.000000
75.	8.	3.85	0.19	50.27 50.28	5.02	-5.00 -5.00	0.3030 0.3238	0.0203 0.0206	0.3001 0.3203	0.0467 0.0517	0.0297 0.0334	0.0095 0.0103	0.0046 0.0045	0.0015 0.0014	0.000000
75. 75.	9. 10.	3.85 3.85	0.19 0.19	50.26	5.54 6.00	-5.00 -5.00	0.3425	0.0207	0.3203	0.0564	0.0361	0.0103	0.0046	0.0014	0.000000
75.	11.	3.85	0.19	50.28	7.03	-5.00	0.3869	0.0217	0.3814	0.0684	0.0416	0.0111	0.0042	0.0013	0.000000
75.	12.	3.84	0.19	50.17	8.05	-5.00	0.4363	0.0227	0.4288	0.0836	0.0488	0.0149	0.0037	0.0002	0.000000
75.	13.	3.85	0.19	50.41	9.07	-5.00	0.4869	0.0246	0.4769	0.1010	0.0579	0.0154	0.0032	-0.0009	0.000000
75.	14.	3.83	0.19	50.07	10.01	-5.00	0.5304	0.0263	0.5177	0.1181	0.0697	0.0147	0.0033	-0.0024	0.000000
75.	15.	3.82	0.19	49.86	12.04	-5.00	0.6352	0.0314	0.6146	0.1633	0.0935	0.0165	0.0037	-0.0015	0.000000
75.	16.	3.83	0.19	50.02	16.02	-5.00	0.8179	0.0375	0.7758	0.2617	0.1454	0.0188	-0.0001	-0.0147	0.000000
75.	17.	3.81	0.18	49.62	20.02	-5.00	0.9850	0.0436	0.9105	0.3782	0.2050	0.0268	-0.0159	-0.0424	0.000000
76.	1.	3.82	0.19	50.05	4.06	-15.01	0.2372	0.0147	0.2356	0.0314	0.0343	0.0222	0.0188	0.0594	0.000000
76.	2.	3.82	0.19	50.27	4.07	-12.01	0.2494	0.0171	0.2476	0.0347	0.0359	0.0196	0.0132	0.0411	0.000000
76.	3.	3.82	0.19	50.39	4.06	-9.01	0.2529	0.0182	0.2510	0.0361	0.0341	0.0151	0.0084	0.0280	0.000000
76.	4.	3.82	0.19	50.38	4.03	-6.01	0.2518	0.0173	0.2500	0.0349	0.0268	0.0097	0.0047	0.0211	0.000000
76.	5.	3.82	0.19	50.27	4.03	-4.00	0.2539	0.0172	0.2520	0.0350	0.0253	0.0065	0.0031	0.0113	0.000000
76.	6.	3.81	0.19	50.04	4.02	-2.00	0.2525	0.0156	0.2508	0.0333	0.0240	0.0032	0.0012	0.0094	0.000000
76.	7.	3.80	0.19	49.92	4.01	0.06	0.2532	0.0152	0.2515	0.0328	0.0236	-0.0003	-0.0005	0.0031	0.000000
76.	8.	3.81	0.19	50.04	4.01	2.01	0.2556	0.0152	0.2539	0.0330	0.0220	-0.0027	-0.0019	-0.0023	0.000000
76.	9.	3.82	0.19	50.27	4.01	4.02	0.2621	0.0161	0.2603	0.0344	0.0218	-0.0051	-0.0042	-0.0031	0.000000
76.	10.	3.82	0.19	50.27	4.03	6.01	0.2683	0.0177	0.2664	0.0366	0.0291	-0.0098	-0.0067	-0.0029	0.000000
76.	11.	3.82	0.19	50.38	4.05	9.01	0.2710	0.0182	0.2690	0.0373	0.0349	-0.0156	-0.0103	-0.0065	0.000000
76.	12.	3.82	0.19	50.39	4.05	12.02 15.01	0.2712 0.2657	0.0191 0.0201	0.2692	0.0382 0.0388	0.0354 0.03 8 0	-0.0208 -0.0248	-0.0145 -0.0176	-0.0123 -0.01 8 3	0.000000
76.	13.	3.81	0.19	50.16	4.04	15.01	0.2037	0.0201	0.2030	0.0300	0.0360	-0.0246	-0.0170	-0.0163	
<i>7</i> 7.	1.	3.81	0.19	50.40	8.08	15.01	0.4204	0.0209	0.4133	0.0797	0.0663	-0.0373	-0.0162	-0.0006	0.000000
77.	2.	3.81	0.19	50.29	8.07	12.01	0.4288	0.0194	0.4218	0.0795	0.0604	-0.0307	-0.0150	0.0014	0.000000
<i>7</i> 7.	3.	3.81	0.19	50.28	8.07	9.02	0.4360	0.0187	0.4291	0.0797	0.0577	-0.0236	-0.0113	0.0041	0.000000
<i>77</i> .	4.	3.81	0.19	50.40	8.06	6.02	0.4378	0.0198	0.4307	0.0810	0.0509	-0.0163	-0.0071	0.0027	0.000000
77.	5.	3.79	0.19	49.94	8.07	4.00	0.4407	0.0222	0.4333	0.0838	0.0525	-0.0100	-0.0041	-0.0022	0.000000
77.	6.	3.80	0.19	50.29	8.08	1.99	0.4397	0.0227	0.4321	0.0842	0.0546 0.0546	-0.0049 -0.0003	-0.0026 -0.0009	-0.0024 -0.0008	0.000000
77. 77.	7. 8.	3.80 3.79	0.19 0.19	50.17 50.06	8.08 8.08	0.05 -2.01	0.4398 0.4413	0.0229 0.0222	0.4322 0.4338	0.0845 0.0840	0.0535	0.0060	0.0006	-0.0034	0.000000
77.	9.	3.79	0.19	50.06	8.07	-4.03	0.4367	0.0217	0.4293	0.0828	0.0515	0.0111	0.0027	-0.0042	0.000000
77.	10.	3.79	0.19	50.06	8.06	-6.00	0.4233	0.0201	0.4163	0.0792	0.0491	0.0173	0.0048	0.0078	0.000000
<i>7</i> 7.	11.	3.79	0.19	50.17	8.08	-8.99	0.4130	0.0186	0.4063	0.0764	0.0571	0.0236	0.0091	0.0152	0.000000
77.	12.	3.79	0.19	50.06	8.08	-12.03	0.4034	0.0178	0.3969	0.0744	0.0600	0.0293	0.0143	0.0287	0.000000
77.	13.	3.79	0.19	50.06	8.07	-15.01	0.3887	0.0137	0.3829	0.0681	0.0587	0.0322	0.0216	0.0504	0.000000
78.	1.	3.78	0.19	49.97	12.02	-15.01	0.5562	0.0196	0.5400	0.1350	0.0913	0.0409	0.0232	0.0371	0.000000
78.	2.	3.79	0.19	50.20	12.06	-12.02	0.5887	0.0250	0.5704	0.1475	0.0959	0.0389	0.0092	0.0005	0.000000
78.	3.	3.78	0.19	49.97	12.07	-9.01	0.6025	0.0267	0.5836	0.1521	0.0961	0.0294	0.0064	0.0006	0.000000
78.	4.	3.78	0.19	49.86	12.08	-6.01	0.6238	0.0287	0.6040	0.1586	0.0919	0.0202	0.0037	0.0043	0.000000
78.	5.	3.77	0.19	49.86	12.10	-4.02	0.6356	0.0308	0.6150	0.1633	0.0951	0.0126	0.0024	0.0009	0.000000
78.	6.	3.79	0.19	50.32	12.10	-2.02	0.6383	0.0303	0.6178	0.1635	0.0950	0.0068	0.0001	-0.0033	0.000000
78.	7.	3.78	0.19	50.09	12.11	0.07	0.6403	0.0301	0.6197	0.1637	0.0961	0.0014	-0.0036	-0.0064	0.000000
78.	8.	3.78	0.19	49.98	12.09	2.02	0.6385	0.0299	0.6180	0.1631	0.0940	-0.0044	-0.0057	-0.0081	0.000000
78.	9.	3.79	0.19	50.21	12.08	4.05	0.6370	0.0284	0.6169	0.1611	0.0887	-0.0121	-0.0057	-0.0052	0.000000
78.	10.	3.78	0.19	50.09	12.09	6.00	0.6374	0.0281	0.6173	0.1610	0.0918	-0.0180	-0.0080	-0.0064	0.000000
78.	11.	3.79	0.19	50.32	12.03	9.00	0.6231	0.0278 0.0271	0.6036	0.1571 0.1539	0.1005 0.1008	-0.0292 -0.0395	-0.0093 -0.0094	-0.0013 0.0055	0.000000
78.	12.	3.79	0.19	50.20 49.97	12.02 12.04	12.02 14.99	0.6114 0.6032	0.0271	0.5840	0.1534	0.1008	-0.0551	-0.0009	0.0331	0.000000
78.	13.	3.78	0.19	47.7/	12.04	14.77	V.UU32	V.U203	V-7040	V.1J.7 4		-0.0031	-42007	····	
79.	2.	3.82	0.19	50.03	-2.02	5.00	0.0459	0.0163	0.0465	0.0147	0.0111	-0.0015	-0.0048	-0.0062	0.006055
79.	3.	3.83	0.19	50.26	-0.07	5.00	0.1095	0.0170	0.1095	0.0169	0.0146	-0.0029	-0.0049	-0.0062	0.005992

Run	Point	R	M	q	α	β .	C _N	C _A	C_L	CD	C _m	q	C _n	$\mathbf{c}_{\mathbf{Y}}$	C _q
70		3.83	0.19	50.26	2.01	5.00	0.1850	0.0162	0.1843	0.0227	0.0172	-0.0043	-0.0042	-0.0090	0.005948
79. 79.	4. 5.	3.82	0.19	50.15	3.05	5.00	0.2252	0.0155	0.2241	0.0275	0.0184	-0.0048	-0.0046	-0.0100	0.005931
79.	6.	3.83	0.19	50.27	4.00	5.00	0.2654	0.0156	0.2636	0.0341	0.0196	-0.0054	-0.0055	-0.0079	0.005941
79.	7.	3.83	0.19	50.50	4.50	5.00	0.2848	0.0159	0.2827	0.0382	0.0226	-0.0068	-0.0060	-0.0056	0.005948
79 .	8.	3.83	0.19	50.39	5.03	5.00	0.3075	0.0175	0.3048	0.0444	0.0292	-0.0095	-0.0060 -0.0062	-0.0002 0.0014	0.005948 0.005875
79.	9.	3.83	0.19	50.50	5.51	5.00	0.3282	0.0177	0.3250 0.3458	0.0492	0.0325 0.0359	-0.0101 -0.0110	-0.0062 -0.0064	0.0014	0.005959
79.	10.	3.82	0.19	50.39	6.06	5.00 5.00	0.3496 0.3895	0.0177 0.0175	0.3438	0.0545 0.0652	0.0339	-0.0110	-0.0067	0.0056	0.005959
79.	11.	3.82 3.82	0.19 0.19	50.16 50.40	7.05 8.01	5.00	0.4320	0.0179	0.4253	0.0779	0.0464	-0.0145	-0.0068	0.0071	0.005990
79. 79.	12. 13.	3.82	0.19	50.29	9.04	5.00	0.4815	0.0200	0.4724	0.0953	0.0552	-0.0151	-0.0059	0.0042	0.005924
79.	14.	3.81	0.19	50.19	10.03	5.00	0.5311	0.0230	0.5189	0.1151	0.0675	-0.0146	-0.0055	-0.0013	0.005867
79.	15.	3.81	0.19	50.09	12.01	5.00	0.6263	0.0265	0.6070	0.1563	0.0896	-0.0144	-0.0070	-0.0051	0.005913 0.005877
79.	16.	3.81	0.19	50.14	16.10	5.00	0.8544	0.0365	0.8107	0.2720	0.1369	-0.0163 -0.0191	-0.0152 -0.0263	-0.0194 -0.0349	0.005877
79.	17.	3.79	0.18	49.62	20.02	5.00	1.0703	0.0449	0.9902	0.4086	0.1950	-0.0191	-0.0203	-0.03-49	0.005007
90	•	3.79	0.19	49.80	-2.02	-5.00	0.0406	0.0170	0.0412	0.0155	0.0118	0.0020	0.0042	0.0095	0.006102
80. 80.	1. 2.	3.80	0.19	50.15	-0.06	-5.00	0.1047	0.0176	0.1047	0.0175	0.0154	0.0037	0.0042	0.0094	0.006082
80.	2. 3.	3.80	0.19	50.15	2.05	-5.00	0.1789	0.0169	0.1781	0.0233	0.0184	0.0055	0.0036	0.0087	0.006094
80.	4.	3.80	0.19	50.27	3.06	-5.00	0.2174	0.0161	0.2163	0.0277	0.0193	0.0061	0.0038	0.0100	0.006024
80.	5.	3.81	0.19	50.38	4.07	-5.00	0.2559	0.0154	0.2542	0.0335	0.0204	0.0066	0.0040	0.0102	0.0059 84 0.0059 58
80.	6.	3.81	0.19	50.39	4.54	-5.00	0.2752	0.0154	0.2731	0.0372	0.0211	0.0068 0.0088	0.0043 0.0051	0.0101 0.0052	0.005896
80.	7.	3.81	0.19	50.50	5.03	-5.00	0.2981	0.0170 0.0172	0.2955	0.0431 0.0472	0.0265 0.0295	0.0094	0.0051	0.0057	0.005910
80.	8.	3.80	0.19	50.39 50.28	5.47 6.05	-5.00 -5.00	0.3157 0.3391	0.0172	0.3127	0.0529	0.0326	0.0101	0.0053	0.0043	0.005882
80. 80.	9. 10.	3.80 3.81	0.19 0.19	50.28	7.03	-5.00	0.3803	0.0172	0.3752	0.0645	0.0410	0.0128	0.0048	-0.0013	0.005842
80.	11.	3.80	0.19	50.29	8.00	-5.00	0.4261	0.0191	0.4193	0.0782	0.0458	0.0155	0.0044	-0.0018	0.005776
80.	12.	3.80	0.19	50.29	9.03	-5.00	0.4755	0.0206	0.4664	0.0950	0.0536	0.0166	0.0040	-0.0029	0.005685
80.	13.	3.79	0.19	50.19	10.04	-5.00	0.5253	0.0236	0.5132	0.1148	0.0668	0.0151	0.0036	-0.0036	0.005828 0.005819
80.	14.	3.79	0.19	49.98	12.07	-5.00	0.6268	0.0285	0.6070	0.1590	0.0927	0.0157 0.0203	0.0036 -0.0011	-0.0018 -0.0152	0.005875
80.	15.	3.78	0.19	49.91	16.04	-5.01	0.8198	0.0372	0.7776 0.93 8 0	0.2622 0.3914	0.1476 0.2072	0.0203	-0.0159	-0.0415	0.005846
80.	16.	3.78	0.19	49.73	20.05	-5.01	1.0154	0.0461	0.9360	0.3714	0.2012	0.0503	0,0107		
81.	I.	3.79	0.19	50.04	4.08	15.01	0.2679	0.0199	0.2658	0.0390	0.0377	-0.0248	-0.0176	-0.0185	0.006055
81.	2.	3.80	0.19	50.39	4.09	12.01	0.2724	0.0190	0.2704	0.0383	0.0351	-0.0208	-0.0143	-0.0123	0.006002
81.	3.	3.80	0.19	50.27	4.09	9.00	0.2750	0.0183	0.2730	0.0379	0.0349	-0.0158	-0.0103	-0.0062	0.006039
81.	4.	3.80	0.19	50.38	4.07	6.01	0.2694	0.0175	0.2675	0.0366	0.0284	-0.0101	-0.0066 -0.0035	-0.0027 -0.0069	0.006036 0.005974
81.	5.	3.78	0.19	49.81	4.04	4.01	0.2607	0.0146	0.2590 0.2565	0.0329 0.0326	0.0195 0.0209	-0.0045 -0.0027	-0.0033	-0.0037	0.005890
81.	6.	3.77	0.19	49.69	4.04	2.02 0.07	0.2582 0.2566	0.0145 0.0144	0.2550	0.0325	0.0224	-0.0027	-0.0003	-0.0005	0.005985
81. 81.	7. 8.	3.78 3.78	0.19 0.19	49.92 49.92	4.04 4.05	-1.99	0.2573	0.0145	0.2556	0.0327	0.0223	0.0030	0.0013	0.0022	0.005975
81.	o. 9.	3.78	0.19	50.04	4.05	-4.03	0.2562	0.0148	0.2545	0.0329	0.0212	0.0057	0.0032	0.0056	0.005981
81.	10.	3.79	0.19	50.27	4.06	-6.01	0.2595	0.0171	0.2576	0.0354	0.0231	0.0090	0.0059	0.0085	0.005990
81.	11.	3.78	0.19	50.16	4.10	-9.01	0.2562	0.0164	0.2544	0.0347	0.0336	0.0149	0.0086	0.0248	0.006038
81.	12.	3.78	0.19	50.04	4.10	-12.02	0.2506	0.0128	0.2490	0.0307	0.0361	0.0196 0.0223	0.0130 0.0189	0.0409 0.0597	0.006029 0.006108
81.	13.	3.77	0.19	49.93	4.09	-15.00	0.2395	0.0091	0.2382	0.0261	0.0344	0.0223	0.0109	0.0577	0.000100
92		3.78	0.19	50.06	8.04	-15.00	0.3908	0.0146	0.3849	0.0691	0.0588	0.0323	0.0218	0.0477	0.005917
82. 82.	1. 2.	3.78	0.19	50.29	8.06	-11.99	0.4072	0.0185	0.4006	0.0754	0.0599	0.0293	0.0138	0.0244	0.005831
82.	3.	3.78	0.19	50.29	8.05	-9.01	0.4133	0.0185	0.4066	0.0762	0.0566	0.0233	0.0089	0.0136	0.005797
82_	4.	3.78	0.19	50.29	8.03	-6.01	0.4196	0.0178	0.4130	0.0762	0.0475	0.0174	0.0048	0.0103	0.005737 0.005826
82.	5.	3.78	0.19	50.29	8.02	-4.01	0.4260	0.0179	0.4194	0.0772	0.0451 0.0449	0.0140	0.0024 0.0005	0.0071 0.0080	0.005914
82.	6.	3.77	0.19	49.94	8.02	-2.01	0.4296	0.0184 0.0193	0.4228 0.4243	0.0782 0.0793	0.0475	0.0001	-0.0014	0.0034	0.005938
82.	7.	3.77	0.19	49.94 49.83	8.02 8.02	-0.06 2.01	0.4312 0.4368	0.0195	0.4298	0.0802	0.0459	-0.0082	-0.0026	0.0095	0.005986
82. 82.	8. 9.	3.77 3.79	0.19 0.19	50.40	8.02	4.02	0.4360	0.0193	0.4292		0.0444	-0.0133	-0.0048	0.0075	0.005964
82.	9. 10.	3.80		50.63	8.03	6.01	0.4322	0.0177	0.4255		0.0485	-0.0166	-0.0077	0.0075	0.005971
82.		3.80		50.63	8.05	9.00	0.4333	0.0181	0.4265		0.0577	-0.0236	-0.0113	0.0055	0.005929
82.	12.	3.79	0.19	50.52	8.05	12.01	0.4295	0.0193	0.4226		0.0604	-0.0307	-0.0150	0.0015	0.005917 0.006015
82.	13.	3.79	0.19	50.40	8.06	15.00	0.4223	0.0208	0.4153	0.0798	0.0664	-0.0373	-0.0158	0.0002	0.000013
	_	204	Λ 10	49.98	12.04	-15.04	0.5617	0.0203	0.5451	0.1371	0.0901	0.0416	0.0253	0.0450	0.005321
84. 84.		3.84 3.83			12.04	-12.06	0.5934	0.0242	0.5751		0.0954	0.0398	0.0090	0.0004	0.005375
84.		3.83			12.10	-9.05	0.6017	0.0249	0.5831		0.0949	0.0293		0.0006	0.005347
84.		3.82			12.10	-6.04	0.6166	0.0262	0.5974		0.0908	0.0198		0.0026	0.005367
84.		3.81	0.18	49.75	12.12	-3.99	0.6364	0.0288	0.6162	0.1618	0.0942	0.0130	0.0021	0.0017	0.005573

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					NASA L	ingley Re	search Cen	ter 14-1	y 22-Foot	Subsonic	Tunnel	Test 391			
Run	Point	R	М	q	α	β	C _N	C _A	$c_{\mathtt{L}}$	$\mathbf{c}_{\mathtt{D}}$	C _m	G	C _n	C _Y	C
							••	^	-	-0	-111	٦	⊸ 11	Cy	Cq
84.	8.	3.82	0.18	49.98	12.13	-2.09	0.6411	0.0290	0.6207	0.1631	0.0953	0.0071	0.0001	-0.0031	0.005522
84.	9.	3.81		49.86	12.13	-0.08	0.6403	0.0287	0.6200		0.0966			-0.0068	0.005502
84.	10.	3.83		50.32	12.13	2.00	0.6356	0.0274	0.6157	0.1603	0.0926	-0.0050		-0.0072	0.005537
84.	11.	3.80		49.75	12.11	4.04	0.6408	0.0265	0.6210	0.1603	0.0879	-0.0128	-0.0054	-0.0043	0.005575
84. 84.	12. 13.	3.82 3.82		50.20 50.32	12.11 12.11	6.03 9.00	0.6244	0.0245	0.6053	0.1549	0.0909	-0.0168		-0.0041	0.005464
84.	14.	3.81	0.19	50.20	12.11	12.01	0.6165 0.6130	0.0235 0.0232	0.5979	0.1524	0.0963	-0.0288		0.0034	0.005542
84.	15.	3.80		49.97	12.15	15.01	0.6101	0.0232	0.5945 0.5909	0.1513 0.1544	0.0968 0.1110	-0.0401	-0.0095	0.0095	0.005553
									0.5707	0.1544	0.1110	-0.0558	-0.0007	0.0304	0.005642
85.	2.	2.42		19.90	-2.05	-0.04	0.0483	0.0144	0.0488	0.0126	0.0135	-0.0001	-0.0006	0.0005	0.012466
85.	3.	2.43	0.12	20.02	0.06	-0.04	0.1136	0.0154	0.1136	0.0155	0.0163	-0.0003	-0.0007	-0.0003	0.012365
85. 85.	4. 5.	2.43	0.12 0.12	20.02	2.03	-0.04	0.1822	0.0148	0.1816	0.0212	0.0193	-0.0002	-0.0006	0.0001	0.012331
85.	5. 6.	2.42 2.43	0.12	19.90 20.02	3.01 4.00	-0.04 -0.04	0.2239	0.0141	0.2228	0.0258	0.0208	-0.0002	-0.0008	-0.0013	0.012404
85.	7.	242	0.12	20.02	4.52	-0.04	0.2382	0.0130 0.0123	0.2567 0.2755	0.0310	0.0212	-0.0002	-0.0008	-0.0010	0.012307
85.	8.	2.43	0.12	20.02	5.04	-0.04	0.2970	0.0125	0.2733	0.0341 0.0377	0.0219 0.0223	-0.0003 0.0000	-0.0009 -0.0010	-0.0016	0.012311
85.	9.	2.42	0.12	19.90	5.51	-0.04	0.3177	0.0108	0.3152	0.0413	0.0226	0.0000	-0.0010	-0.0029 -0.0031	0.012297 0.012301
85.	10.	2.43	0.12	20.02	6.00	-0.04	0.3352	0.0100	0.3324	0.0450	0.0231	-0.0003	-0.0010	-0.0031	0.012369
85.	11.	2.42	0.12	19.91	7.05	-0.04	0.3725	0.0079	0.3687	0.0536	0.0270	-0.0003	-0.0014	-0.0041	0.012232
85.	12.	2.42	0.12	20.02	7.05	-0.04	0.3706	0.0078	0.3669	0.0532	0.0271	-0.0003	-0.0014	-0.0046	0.012223
85.	13.	2.42	0.12	19.91	8.04	-0.04	0.4055	0.0057	0.4007	0.0623	0.0300	0.0004	-0.0017	-0.0060	0.012216
85. 85.	14. 15.	2.42 2.42	0.12	19.91	9.05	-0.04	0.4422	0.0037	0.4361	0.0731	0.0333	0.0006	-0.0021	-0.0063	0.012159
85.	15. 16.	2.42	0.12 0.12	19.91 19.92	10.00 12.03	-0.04 -0.04	0.5041 0.6031	0.0098	0.4948	0.0972	0.0428	0.0041	-0.0012	-0.0199	0.012164
85.	17.	2.41	0.12	19.71	16.02	-0.04	0.8450	0.0148 0.0325	0.5867 0.8032	0.1401 0.2644	0.0681 0.1391	0.0023 0.0074	-0.0037	-0.0150	0.012158
85.	18.	2.39	0.11	19.39	20.05	-0.04	1.0692	0.0398	0.9908	0.4040	0.1987	0.0074	-0.0100 -0.0223	-0.0216 -0.0447	0.012286 0.012335
0.0		2.42		70.01								_			313
86. 86.	I. 2.	2.42 2.42	0.12 0.12	20.01 19.90	-2.02 -0.09	-0.04	0.0500	0.0139	0.0505	0.0122	0.0140	-0.0001	-0.0004	-0.0007	0.008507
86.	3.	2.42	0.12	20.01	2.07	-0.04 -0.04	0.1080 0.1823	0.0148	0.1080	0.0147	0.0168	-0.0003	-0.0004	-0.0015	0.008494
86.	4.	242	0.12	20.02	3.06	-0.04	0.2193	0.0140 0.0134	0.1817 0.2182	0.0206 0.0251	0.0199 0.0209	-0.0003	-0.0004	-0.0023	0.008426
86.	5.	2.42	0.12	19.90	4.06	-0.04	0.2586	0.0134	0.2571	0.0251	0.0209	-0.0004 -0.0004	-0.0005 -0.0006	-0.0027 -0.0036	0.008436 0.008414
86.	6.	2.42	0.12	20.02	4.50	-0.04	0.2748	0.0120	0.2730	0.0335	0.0224	-0.0004	-0.0007	-0.0041	0.008414
86.	7.	2.42	0.12	20.02	5.00	-0.04	0.2939	0.0114	0.2918	0.0370	0.0231	-0.0002	-0.0007	-0.0046	0.008406
86.	8.	2.42	0.12	20.02	5.51	-0.04	0.3147	0.0104	0.3123	0.0406	0.0233	-0.0001	-0.0008	-0.0046	0.008375
86.	9.	2.42	0.12	20.02	6.04	-0.04	0.3362	0.0095	0.3333	0.0448	0.0239	-0.0004	-0.0009	-0.0052	0.008384
86. e.	10.	2.42	0.12	19.90	7.03	-0.04	0.3737	0.0077	0.3699	0.0534	0.0275	-0.0005	-0.0011	-0.0061	0.008373
86. 86.	11. 12.	2.43 2.42	0.12 0.12	20.14 20.03	8.04 9.02	-0.04	0.4251	0.0110	0.4194	0.0704	0.0350	0.0022	-0.0004	-0.0158	0.008304
86.	13.	2.42	0.12	19.91	10.07	-0.04 -0.04	0.4734 0.5300	0.0141 0.0207	0.4654 0.5182	0.0882 0.1131	0.0460	0.0021	-0.0018	-0.0124	0.008359
86.	14.	2.43	0.12	20.15	12.02	-0.04	0.6288	0.0256	0.6097	0.1151	0.0674 0.0916	-0.0003 0.0013	-0.0011 -0.0031	-0.0036 -0.0096	0.008413
86.	15.	2.42	0.12	19.94	16.08	-0.04	0.8447	0.0327	0.8025	0.2654	0.1421	0.0068	-0.0088	-0.0206	0.008383
86.	16.	2.43	0.12	20.08	20.01	-0.04	1.0638	0.0393	0.9861	0.4010	0.1976	0.0110	-0.0220	-0.0458	0.008319
87.	1.	2.42	0.12	20.01	-2.00	-0.04	0.0499	0.0136	0.0503	0.0118	0.0145	-0.0001	-0.0003	0.0010	0.007100
87.	2.	2.41	0.12	19.90	0.01	-0.04	0.1129	0.0146	0.1129	0.0116	0.0143	-0.0001	-0.0003 -0.0004	-0.0018 -0.0026	0.007198 0.007203
87.	3.	241	0.12	19.90	2.00	-0.04	0.1825	0.0138	0.1819	0.0202	0.0200	-0.0003	-0.0003	-0.0021	0.007203
87.	4.	2.42	0.12	19.90	3.00	-0.04	0.2186	0.0134	0.2176	0.0248	0.0211	-0.0004	-0.0005	-0.0033	0.007185
87.	5.	2.42	0.12	19.90	3.99	-0.04	0.2580	0.0123	0.2565	0.0303	0.0219	-0.0004	-0.0006	-0.0036	0.007161
87.	6. 7	2.42	0.12	20.02	4.52	-0.04	0.2763	0.0117	0.2745	0.0334	0.0225	-0.0004	-0.0006	-0.0040	0.007129
87. 87.	7. 8.	2.43	0.12	20.25	5.06	-0.04	0.2984	0.0110	0.2962	0.0373	0.0232	0.0000	-0.0007	-0.0049	0.007083
87. 87.	8. 9.	2.44 2.44	0.12 0.12	20.25 20.25	5.50 6.04	-0.04 -0.04	0.3143	0.0101	0.3119	0.0402	0.0235	-0.0001	-0.0007	-0.0053	0.007085
97. 87	10	2.44		20.23	7.03	-0.04	0.3365	0.0094	0.3337	0.0448	0.0242	-0.0004	-0.0008	-0.0055	0.007077

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Run	Point	R	M	q	α	. B	C _N	C _A	C_L	C_{D}	C	G	C _a	CY	Cq
88.	5.	2.42	0.12	20.01	4.00	-0.04	0.2571	0.0122	0.2557	0.0301	0.0221	-0.0005	-0.0005	-0.0045	0.004905
88.	6.	2.42	0.12	20.02	4.50	-0.04	0.2754	0.0118	0.2736	0.0334	0.0232	-0.0004	-0.0005	-0.0045	0.004901
88.	7.	2.41	0.12	19.90	5.01	-0.04	0.2968	0.0114	0.2947	0.0373	0.0243	-0.0003	-0.0006	-0.0050	0.004896
88. 88.	8. 9.	2.41 2.41	0.12 0.12	19.90 19.90	5.50 6.00	-0.04 -0.04	0.3188 0.3416	0.0109 0.0111	0.3163 0.3386	0.0414 0.0467	0.0247 0.0253	-0.0003 -0.0003	-0.0006 -0.0007	-0.0051 -0.0055	0.004910 0.004895
88.	9. 10.	2.42	0.12	20.02	7.01	-0.04	0.3940	0.0111	0.3892	0.0487	0.0255	0.0020	-0.0007	-0.0105	0.004893
88.	11.	242	0.12	20.02	8.01	-0.04	0.4372	0.0198	0.4302	0.0805	0.0528	-0.0007	-0.0009	-0.0051	0.004890
88.	12.	2.41	0.12	19.91	9.02	-0.04	0.4865	0.0219	0.4770	0.0979	0.0649	0.0000	-0.0016	-0.0070	0.004885
88.	13.	2.42	0.12	19.91	10.01	-0.04	0.5329	0.0234	0.5207	0.1156	0.0745	0.0004	-0.0019	-0.0083	0.004895
88.	14.	2.42	0.12	19.92	12.04	-0.04	0.6342	0.0263	0.6148	0.1580	0.0947	0.0015	-0.0032	-0.0117	0.004901
88.	15.	241	0.12	19.82	16.00	-0.04	0.8422	0.0325	0.8006	0.2633	0.1421	0.0079	-0.0102	-0.0235	0.004885
88.	16.	2.42	0.12	19.96	20.06	-0.04	1.0647	0.0394	0.9867	0.4021	0.1990	0.0111	-0.0222	-0.0477	0.004853
89.	1.	2.42	0.12	20.01	-2.03	-0.04	0.0515	0.0133	0.0520	0.0115	0.0147	-0.0002	-0.0001	-0.0022	0.002504
89.	2.	2.43	0.12	20.13	0.03	-0.04	0.1147	0.0143	0.1147	0.0143	0.0175	-0.0006	-0.0002	-0.0033	0.002501
8 9.	3.	2.42	0.12	20.01	2.00	-0.04	0.1816	0.0137	0.1810	0.0200	0.0204	-0.0006	-0.0002	-0.0036	0.002501
89.	4.	242	0.12	20.01	3.01	-0.04	0.2182	0.0130	0.2173	0.0244	0.0219	-0.0006	-0.0002	-0.0049	0.002498
89.	5.	2.42	0.12	20.01	4.03	-0.04	0.2582	0.0121	0.2567	0.0303	0.0231	-0.0007	-0.0004	-0.0050	0.002497
89.	6.	2.42	0.12	20.02	4.52	-0.04	0.2776	0.0121	0.2758	0.0339	0.0247	-0.0004	-0.0004	-0.0051	0.002507
89. 89.	7. 8.	2.42 2.42	0.12 0.12	20.02 20.02	5.03 5.51	-0.04	0.3000 0.3253	0.0123	0.2978	0.0385	0.0260	-0.0004	-0.0004	-0.0057	0.002493
89.	9.	2.43	0.12	20.02	6.01	-0.04 -0.04	0.3253	0.0131 0.0152	0.3225 0.3472	0.0443 0.0518	0.0278 0.0330	0.0003	-0.0003	-0.0074	0.002489
89.	10.	2.43	0.12	20.14	7.00	-0.04	0.3945	0.0132	0.3472	0.0666	0.0330	0.0007 -0.0010	-0.0006 -0.0007	-0.0098 -0.0058	0.002480 0.002494
89.	11.	2.42	0.12	20.02	8.02	-0.04	0.4417	0.0208	0.4345	0.0822	0.0572	-0.0004	-0.0007	-0.0080	0.002494
89.	12.	2.42	0.12	20.03	9.04	-0.04	0.4865	0.0221	0.4770	0.0983	0.0661	0.0000	-0.0012	-0.0087	0.002451
89.	13.	2.42	0.12	20.03	10.05	-0.04	0.5339	0.0236	0.5216	0.1165	0.0756	0.0003	-0.0018	-0.0098	0.002491
89.	14.	2.42	0.12	20.04	12.09	-0.04	0.6342	0.0263	0.6146	0.1585	0.0955	0.0013	-0.0030	-0.0127	0.002495
89.	15.	2.42	0.12	19.94	16.00	-0.04	0.8396	0.0324	0.7981	0.2626	0.1424	0.0069	-0.0089	-0.0225	0.002496
89.	16.	2.40	0.12	19.61	19.29	-0.04	1.0242	0.0386	0.9540	0.3747	0.1889	0.0097	-0.0142	-0.0319	0.002497
90.	1.	2.43	0.12	20.13	-2.04	-0.04	0.0517	0.0131	0.0521	0.0113	0.0148	-0.0003	-0.0001	-0.0029	0.000000
90.	2.	2.43	0.12	20.13	-0.02	-0.04	0.1126	0.0142	0.1126	0.0142	0.0175	-0.0007	-0.0001	-0.0040	0.000000
90.	3.	2.43	0.12	20.13	2.06	-0.04	0.1834	0.0136	0.1828	0.0202	0.0210	-0.0005	-0.0001	-0.0040	0.000000
90.	4.	2.43	0.12	20.24	3.03	-0.04	0.2208	0.0129	0.2198	0.0246	0.0225	-0.0003	-0.0002	-0.0049	0.000000
90.	5.	2.42	0.12	20.01	4.00	-0.04	0.2575	0.0126	0.2560	0.0306	0.0240	-0.0007	-0.0003	-0.0058	0.000000
90.	6. 7	2.42	0.12	20.02	4.52	-0.04	0.2797	0.0128	0.2778	0.0348	0.0260	-0.0004	-0.0003	-0.0066	0.000000
90. 90.	7. 8.	2.42 2.43	0.12 0.12	20.02	5.03	-0.04	0.3052	0.0138	0.3028	0.0405	0.0286	0.0002	-0.0005	-0.0064	0.000000
90. 90.	9.	2.43	0.12	20.13 20.13	5.50 6.02	-0.04 -0.04	0.3273 0.3524	0.0154 0.0174	0.3243	0.0467	0.0330	-0.0002	-0.0006	-0.0079	0.000000
90.	10.	2.42	0.12	20.13	7.03	-0.04 -0.04	0.3324	0.0174	0.3486 0.3925	0.0543	0.0392 0.0494	-0.0007 -0.0005	-0.0005 -0.0009	-0.0059 -0.0079	0.000000
90.	11.	2.42	0.12	20.02	8.03	-0.04	0.4412	0.0208	0.4339	0.0822	0.0579	-0.0002	-0.0012	-0.0088	0.000000
90.	12.	2.42	0.12	20.03	9.10	-0.04	0.4907	0.0225	0.4810	0.0998	0.0672	0.0002	-0.0015	-0.0092	0.000000
90.	13.	2.42	0.12	19.91	10.07	-0.04	0.5359	0.0239	0.5235	0.1172	0.0764	0.0005	-0.0019	-0.0097	0.000000
90.	14.	2.42	0.12	20.04	12.05	-0.04	0.6332	0.0263	0.6138	0.1579	0.0959	0.0013	-0.0030	-0.0127	0.000000
90.	15.	2.42	0.12	19.94	16.02	-0.04	0.8400	0.0324	0.7984	0.2630	0.1435	0.0074	-0.0090	-0.0226	0.000000
90.	16.	2.41	0.12	19.85	20.00	-0.04	1.0616	0.0393	0.9842	0.4000	0.1994	0.0119	-0.0221	-0.0478	0.000000
91.	1.	3.82	0.19	50.26	-2.09	-0.04	0.0483	0.0141	0.0488	0.0123	0.0144	0.0000	-0.0003	-0.0017	0.007944
91.	2.	3.79	0.18	49.58	0.03	-0.04	0.1130	0.0147	0.1130	0.0148	0.0174	-0.0003	-0.0004	-0.0019	0.007961
91.	3.	3.80	0.18	50.04	2.04	-0.04	0.1825	0.0137	0.1819	0.0202	0.0200	-0.0003	-0.0003	-0.0014	0.007847
91.	4.	3.80	0.18	49.92	3.01	-0.04	0.2182	0.0128	0.2173	0.0243	0.0212	-0.0004	-0.0003	-0.0019	0.007866
91.	5.	3.80	0.18	50.04	4.02	-0.04	0.2568	0.0115	0.2553	0.0294	0.0217	-0.0003	-0.0004	-0.0023	0.007804
91.	6.	3.79	0.18	49.92	4.51	-0.04	0.2773	0.0108	0.2756	0.0325	0.0223	-0.0002	-0.0004	-0.0024	0.007806
91. 91.	7. 8.	3.79 3.79	0.18 0.18	50.04 49.93	5.02 5.56	-0.04 -0.04	0.2955 0.3188	0.0099	0.2935	0.0358	0.0230	0.0000	-0.0004	-0.0024	0.007771
91. 91.	9.	3.79	0.18	49.93 49.93	6.09	-0.04 -0.04	0.3382	0.0093	0.3164	0.0401	0.0238 0.0244	-0.0002 -0.0003	-0.0006 -0.0006	-0.0026 -0.0027	0.007754 0.007746
91.	10.	3.80	0.19	50.28	7.03	-0.04	0.3729	0.0068	0.3693	0.0524	0.0276	-0.0006	-0.0008	-0.0027	0.007746
91.	11.	3.79	0.19	50.28	8.02	-0.04	0.4242	0.0069	0.3033	0.0660	0.0276	0.0004	-0.0013	-0.0034	0.007609
91.	12.	3.79	0.19	50.29	9.02	-0.04	0.4745	0.0128	0.4667	0.0870	0.0430	0.0018	-0.0013	-0.0084	0.007620
91.	13.	3.78	0.18	50.07	10.07	-0.04	0.5281	0.0156	0.5173	0.1077	0.0563	0.0011	-0.0020	-0.0084	0.007663
91.	14.	3.79	0.19	50.21	12.07	-0.04	0.6330	0.0243	0.6140	0.1562	0.0896	0.0011	-0.0031	-0.0072	0.007709
91.	15.	3.78	0.18	49.91	16.01	-0.04	0.8445	0.0341	0.8024	0.2657	0.1424	0.0073	-0.0099	-0.0177	0.007660
91.	16.	3.77	0.18	49.74	20.01	-0.04	1.0686	0.0431	0.9893	0.4062	0.1973	0.0047	-0.0081	-0.0158	0.007633
92.	1.	3.77	0.19	50.26	-2.01	-0.04	0.0508	0.0133	0.0513	0.0115	0.0147	0.0001	-0.0002	-0.0016	0.005790

Run	Point	R	М	q	α.	β	C _N	C _A	$c_{\mathtt{L}}$	C _D	C _m	G	C ₃	C _Y	C _q
		••		•		•	-14	^				•	-	•	•
92.	2.	3.77	0.19	50.15	0.06	-0.04	0.1151	0.0140	0.1151	0.0141	0.0175	-0.0002	-0.0003	-0.0021	0.005779
92.	3.	3.77	0.19	50.15	2.06	-0.04	0.1848	0.0134	0.1842	0.0200	0.0204	-0.0005	-0.0002	-0.0016	0.005742
92.	4.	3.77	0.19	50.27	3.02	-0.04	0.2196	0.0126	0.2187	0.0241	0.0213	-0.0004	-0.0003	-0.0020	0.005705
92.	5.	3.77	0.19	50.27	4.03	-0.04	0.2594	0.0115	0.2579 0.2758	0.0297 0.0327	0.0221 0.0224	-0.0003 -0.0002	-0.0003 -0.0003	-0.0024 -0.0023	0.005659 0.005644
92.	6.	3.77	0.19	50.38 50.39	4.50 5.02	-0.04 -0.04	0.2775 0.2975	0.010 9 0.0103	0.2758	0.0327	0.0224	-0.0002	-0.0004	-0.0029	0.005610
92	7. 8.	3.77 3.77	0.19 0.19	50.39 50.27	5.56	-0.04	0.3203	0.0097	0.2334	0.0407	0.0240	-0.0003	-0.0005	-0.0029	0.005639
92. 92.	9.	3.77	0.19	50.27	6.02	-0.04	0.3396	0.0091	0.3368	0.0447	0.0247	-0.0003	-0.0005	-0.0033	0.005629
92.	10.	3.77	0.19	50.16	7.03	-0.04	0.3891	0.0093	0.3851	0.0568	0.0252	-0.0004	-0.0007	-0.0042	0.005605
92.	11.	3.77	0.19	50.29	8.05	-0.04	0.4376	0.0143	0.4313	0.0755	0.0406	0.0015	-0.0010	-0.0078	0.005638
92.	12.	3.76	0.18	50.07	9.10	-0.04	0.4912	0.0200	0.4818	0.0973	0.0598	-0.0007	-0.0006	-0.0025	0.005677
92.	13.	3.76	0.18	50.07	10.06	-0.04	0.5374	0.0219	0.5253	0.1154	0.0700	-0.0002	-0.0013	-0.0039	0.005669
92.	14.	3.76	0.18	49.98	12.01	-0.04	0.6366	0.0268	0.6171	0.1587	0.0942	0.0016	-0.0034	-0.0091	0.005663
92.	15.	3.76	0.18	49.91	16.02	-0.04	0.8459	0.0345	0.8035	0.2666	0.1436	0.0071	-0.0097	-0.0181	0.005583
92.	16.	3.76	0.18	49.97	20.06	-0.04	1.0637	0.0428	0.9845	0.4051	0.1988	0.0098	-0.0149	-0.0 269	0.005543
93.	1.	3.75	0.18	49.92	-2.06	-0.04	0.0503	0.0131	0.0508	0.0113	0.0147	-0.0001	-0.0002	-0.0025	0.004545
93.	2.	3.75	0.18	49.80	0.04	-0.04	0.1136	0.0139	0.1136	0.0140	0.0175	-0.0005	-0.0002	-0.0027	0.004560
93.	3.	3.77	0.19	50.26	2.08	-0.04	0.1850	0.0133	0.1844	0.0200	0.0204	-0.0005	-0.0002	-0.0023	0.004468
93.	4.	3.77	0.19	50.27	3.08	-0.04	0.2222	0.0125	0.2212	0.0244	0.0214	-0.0005	-0.0002	-0.0026	0.004447
93.	5.	3.76	0.19	50.27	4.02	-0.04	0.2589	0.0115	0.2574	0.0296	0.0222	-0.0003	-0.0003	-0.0031	0.004438
93.	6.	3.76	0.19	50.27	4.52	-0.04	0.2791	0.0111	0.2774	0.0330	0.0230	-0.0004	-0.0003 -0.0003	-0.0033 -0.0032	0.004442
93.	7.	3.76	0.19	50.27	5.10	-0.04	0.3020	0.0103	0.2999	0.0371	0.0240 0.0243	-0.0001 -0.0003	-0.0003	-0.0032	0.004394
93.	8.	3.77	0.19	50.39 50.27	5.52 6.09	-0.04 -0.04	0.3185 0.3448	0.0100 0.00 99	0.3161 0.3418	0.0464	0.0243	-0.0003	-0.0004	-0.0039	0.004375
93. 93.	9. 10.	3.76 3.76	0.19 0.19	50.16	7.07	-0.04	0.3964	0.0033	0.3917	0.0618	0.0319	0.0001	-0.0006	-0.0057	0.004387
93. 93.	11.	3.76	0.19	50.29	8.05	-0.04	0.4389	0.0164	0.4323	0.0778	0.0467	0.0004	-0.0010	-0.0066	0.004367
93.	12.	3.76	0.19	50.18	9.02	-0.04	0.4890	0.0205	0.4798	0.0969	0.0608	-0.0006	-0.0009	-0.0040	0.004438
93.	13.	3.76	0.19	50.19	10.06	-0.04	0.5410	0.0229	0.5286	0.1171	0.0725	0.0000	-0.0016	-0.0060	0.004417
93.	14.	3.78	0.19	50.55	12.08	-0.04	0.6402	0.0273	0.6203	0.1606	0.0954	0.0016	-0.0035	-0.0099	0.004376
93.	15.	3.76	0.18	50.02	16.00	-0.04	0.8466	0.0346	0.8043	0.2666	0.1438	0.0070	-0.0096	-0.0186	0.004368
93.	16.	3.75	0.18	49.85	20.01	-0.04	1.0694	0.0436	0.9899	0.4068	0.1987	0.0066	-0.0109	-0.0216	0.004331
94.	1.	3.76	0.19	50.26	-2.03	-0.04	0.0523	0.0134	0.0527	0.0115	0.0147	-0.0001	-0.0001	-0.0032	0.003178
94.	2.	3.77	0.19	50.26	-0.02	-0.04	0.1138	0.0141	0.1138	0.0141	0.0176	-0.0004	-0.0002	-0.0032	0.003154
94.	3.	3.77	0.19	50.26	2.05	-0.04	0.1865	0.0134	0.1859	0.0201	0.0203	-0.0004	-0.0002	-0.0033	0.003171
94.	4.	3.77	0.19	50.38	3.09	-0.04	0.2236	0.0127	0.2226	0.0247	0.0218	-0.0005	-0.0002	-0.0034	0.003111
94.	5.	3.77	0.19	50.38	4.00	-0.04	0.2588	0.0119	0.2573	0.0299	0.0227	-0.0003	-0.0003	-0.0038	0.003132
94.	6.	3. 7 7	0.19	50.38	4.56	-0.04	0.2819	0.0114	0.2801	0.0338	0.0233	-0.0002	-0.0003	-0.0037	0.003121 0.003120
94.	7.	3.77	0.19	50.38	5.01	-0.04	0.3005	0.0112	0.2984	0.0374	0.0247 0.0254	-0.0001 -0.0005	-0.0003 -0.0004	-0.0043 -0.0046	0.003120
94.	8.	3.77	0.19	50.39	5.55	-0.04	0.3266 0.3493	0.0114 0.0124	0.3240 0.3461	0.0429 0.0490	0.0272	0.0005	-0.0003	-0.0058	0.003107
94.	9. 10	3.77 3.77	0.19 0.19	50.39 50.17	6.02 7.06	-0.04 -0.04	0.3493	0.0124	0.3942	0.0448	0.0272	0.0002	-0.0007	-0.0062	0.003048
94. 94.	10. 11.	3.77	0.19	50.29	8.04	-0.04	0.4437	0.0196	0.4366	0.0815	0.0538	-0.0006	-0.0006	-0.0039	0.003074
94.	12.	3.78	0.19	50.41	9.03	-0.04	0.4896	0.0217	0.4801	0.0982	0.0636	0.0001	-0.0012	-0.0056	0.003096
94.	13.	3.77	0.19	50.19	10.00	-0.04	0.5362	0.0239	0.5239	0.1167	0.0747	0.0005	-0.0019	-0.0068	0.003104
94.	14.	3.78	0.19	50.32	12.04	-0.04	0.6397	0.0276	0.6199	0.1605	0.0957	0.0014	-0.0034	-0.0104	0.003051
94.	15.	3.77	0.18	50.14	16.07	-0.04	0.8486	0.0350	0.8057	0.2685	0.1451	0.0072	-0.0095	-0.0194	0.003045
94.	16.	3.75	0.18	49.62	20.08	-0.04	1.0743	0.0440	0.9939	0.4102	0.2011	0.0087	-0.0137	-0.0265	0.003053
95.	i.	3.77	0.19	50.26	-2.05	-0.04	0.0519	0.0134	0.0524	0.0116	0.0148	-0.0001	-0.0001	-0.0033	0.001711
95.	2.	3.77	0.19	50.26	0.09	-0.04	0.1183	0.0142	0.1183	0.0144	0.0179	-0.0004	-0.0002	-0.0034	0.001647
95.	3.	3.78	0.19	50.38	2.05	-0.04	0.1844	0.0136	0.1838	0.0202	0.0207	-0.0004	-0.0001	-0.0033	0.001716
95.	4.	3.78	0.19	50.38	3.08	-0.04	0.2233	0.0128	0.2223	0.0248	0.0221	-0.0005	-0.0002	-0.0037	0.001696
95.	5.	3.78	0.19	50.38	4.06	-0.04	0.2613	0.0121	0.2598	0.0306	0.0231	-0.0003	-0.0002	-0.0040	0.001692 0.001676
95.	6.	3.78	0.19	50.38	4.51	-0.04	0.2798	0.0118	0.2780	0.0338	0.0244	-0.0001 -0.0001	-0.0003 -0.0005	-0.0039 -0.0045	0.001743
95.	7.	3.77	0.19	50.15	5.04	-0.04	0.3042	0.0119 0.0131	0.3019 0.3264	0.0386	0.0264 0.0279	0.0001	-0.0004	-0.0049	0.001743
95.	8 .	3.78	0.19	50.39 50.38	5.55 6.08	-0.04 -0.04	0.3292 0.3531	0.0131	0.3495	0.0519	0.0279	0.0002	-0.0004	-0.0053	0.001647
95. 05	9. 10	3.77 3.78	0.19	50.28 50.28	6.08 7.02	-0.04	0.3331	0.0140	0.3936	0.0666	0.0439	-0.0012	-0.0003	-0.0030	0.001635
95. 95.	10. 11.	3.76	0.19	30.28 49.94	8.00	-0.04	0.4432	0.0202	0.4361	0.0817	0.0546	-0.0006	-0.0008	-0.0047	0.001710
95. 95.	11. 12.	3.77	0.19	50.18	9.02	-0.04	0.4912	0.0225	0.4816	0.0993	0.0656	-0.0001	-0.0014	-0.0060	0.001704
95. 95.	13.	3.77	0.18	50.08	10.10	-0.04	0.5429	0.0245	0.5302	0.1193	0.0763	0.0008	-0.0019	-0.0075	0.001695
95.	14.	3.76	0.18	49.86	12.05	-0.04	0.6420	0.0279	0.6220	0.1613	0.0964	0.0015	-0.0034	-0.0105	0.001684
95.	15.	3.77	0.18	50.02	16.00	-0.04	0.8454	0.0351	0.8029	0.2668	0.1448	0.0076	-0.0099	-0.0196	0.001641

				•••		,		•							_
Run	Point	R	M	q	α	β	C _N	C _A	$\mathbf{c}_{\mathtt{L}}$	C_D	C _m	၎	C _B	C _Y	$C_{\mathbf{q}}$
							-=-				-				
				40.30	20.06	-0.04	1.0718	0.0437	0.9918	0.4087	0.2009	0.0102	-0.0158	-0.0295	0.001610
95.	16.	3.75	0.18	49.39	20.06	-0.04	1.0716	0.0437	0.7710	0.100	0.200	*			•
96.	2.	5.63	0.28	109.84	-2.02	-0.04	0.0487	0.0144	0.0491	0.0127	0.0145	0.0001	-0.0002	-0.0002	0.004955
96.	3.	5.62	0.28	110.42	0.08	-0.04	0.1141	0.0148	0.1141	0.0150	0.0175	-0.0002	-0.0002	-0.0002	0.004943
96.	4.	5.61	0.28	110.54	2.06	-0.04	0.1818	0.0141	0.1812	0.0206	0.0200	-0.0003	-0.0001	-0.0001 -0.0001	0.004825 0.004807
96.	5.	5.61	0.28	110.54	3.03	-0.04	0.2172	0.0132	0.2162	0.0246	0.0213	-0.0003 -0.0002	-0.0002 -0.0002	-0.0001	0.004759
96.	6.	5.60	0.28	110.78	4.03	-0.04	0.2570	0.0119	0.2555 0.2726	0.0299 0.0328	0.0221 0.0227	-0.0002	-0.0002	-0.0002	0.004729
96.	7.	5.61	0.28	111.24	4.52 5.09	-0.04 -0.04	0.2743 0.2967	0.0112 0.0105	0.2726	0.0328	0.0236	-0.0002	-0.0003	-0.0003	0.004694
96.	8. 9.	5.58 5.57	0.28 0.28	110.32 110.09	5.56	-0.04	0.2307	0.0099	0.3136	0.0405	0.0246	-0.0001	-0.0004	-0.0003	0.004629
96. 96.	10.	5.56	0.28	110.21	6.04	-0.04	0.3362	0.0097	0.3333	0.0451	0.0253	-0.0001	-0.0005	-0.0001	0.004639
96.	11.	5.56	0.28	110.34	7.10	-0.04	0.3896	0.0116	0.3852	0.0596	0.0284	0.0002	-0.0008	-0.0004	0.004606
96.	12.	5.55	0.28	110.13	8.09	-0.04	0.4346	0.0155	0.4281	0.0765	0.0443	0.0003	-0.0009	-0.0010	0.004653
96.	13.	5.54	0.28	110.26	9.00	-0.04	0.4771	0.0182	0.4684	0.0926	0.0547	0.0003	-0.0011 -0.0012	-0.0007 0.0002	0.004641 0.004626
96.	14.	5.53	0.28	110.05	10.00	-0.04	0.5265	0.0223	0.5147 0.6103	0.1133 0.1580	0.0 696 0.0938	-0.0001 0.0010	-0.0012	-0.0056	0.004650
96.	15.	5.52	0.28	109.98	12.02	-0.04	0.6299 0.8297	0.0274 0.0361	0.0103	0.2636	0.0938	0.0059	-0.0090	-0.0145	0.004542
96.	16.	5.53	0.28	110.55 110.93	16.01 20.01	-0.04 -0.04	1.0574	0.0301	0.9779	0.4048	0.1992	0.0115	-0.0225	-0.0368	0.004385
96.	17.	5.53	0.28	110.75	20.01	-0.01	210011								
97.	1.	5.47	0.28	110.19	-2.02	-0.04	0.0480	0.0131	0.0484	0.0114	0.0149	0.0001	-0.0001	-0.0002	0.003811
97.	2.	5.46	0.28	109.84	-0.03	-0.04	0.1094	0.0139	0.1094	0.0139	0.0177	-0.0003	-0.0002	0.0000	0.003811
97.	3.	5.45	0.28	110.31	3.04	-0.04	0.2169	0.0125	0.2160	0.0240	0.0219	-0.0004	-0.0002	0.0006	0.003727 0.003614
97.	4.	5.47	0.28	111.12	4.05	-0.04	0.2557	0.0115	0.2542	0.0295	0.0229	-0.0002	-0.0003 -0.0003	0.0002 0.0001	0.003585
97 .	5.	5.46	0.28	111.01	5.01	-0.04	0.2929	0.0105	0.2908 0.2748	0.0360 0.0330	0.0245 0.0234	-0.0001 -0.0002	-0.0003	0.0001	0.003679
97.	6.	5.44	0.28	110.09	4.57 5.03	-0.04 -0.04	0.2766 0.2955	0.0110 0.0106	0.2934	0.0365	0.0234	-0.0002	-0.0003	0.0003	0.003656
97.	7.	5.45	0.28 0.28	110.78 110.44	5.54	-0.04	0.3164	0.0105	0.3139	0.0410	0.0257	-0.0001	-0.0004	0.0004	0.003613
97. 97.	8. 9.	5.44 5.44	0.28	110.44	6.06	-0.04	0.3423	0.0110	0.3392	0.0471	0.0265	0.0000	-0.0004	-0.0002	0.003573
97.	10.	5.43	0.28	110.34	7.04	-0.04	0.3892	0.0143	0.3845	0.0619	0.0364	-0.0001	-0.0006	-0.0002	0.003595
97.	11.	5.43	0.28	110.25	8.06	-0.04	0.4363	0.0177	0.4295	0.0787	0.0489	-0.0001	-0.0007	0.0002	0.003617
97.	12.	5.43	0.28	110.50	9.04	-0.04	0.4826	0.0213	0.4733	0.0969	0.0622	-0.0004	-0.0008	0.0009	0.003650 0.003682
97.	13.	5.41	0.28	110.06	10.00	-0.04	0.5278	0.0235	0.5157	0.1147	0.0734	0.0002 0.0010	-0.0013 -0.0032	-0.0008 -0.0055	0.003586
97.	14.	5.41	0.28	110.21	12.02	-0.04	0.6314	0.0280	0.6118 0.7918	0.1589 0.2659	0.0952 0.1475	0.0010	-0.0032	-0.0136	0.003555
97.	15.	5.42	0.28	110.55	16.04 20.04	-0.04 -0.04	0.8344 1.0591	0.0367 0.0465	0.7918	0.4067	0.2012	0.0030	-0.0218	-0.0342	0.003431
97.	16.	5.41	0.28	110.23	20.04	-0.04	1.0371	0.0400	. 0.,,,,	0	V.G				
98.	1.	5.36	0.28	109.96	-2.08	-0.04	0.0474	0.0134	0.0478	0.0117	0.0147	0.0001	-0.0001	-0.0006	0.003198
98.	2.	5.35	0.28	109.61	0.05	-0.04	0.1134	0.0142	0.1134	0.0143	0.0177	-0.0003	-0.0002	-0.0004	0.003209
98.	3.	5.37	0.28	110.65	2.06	-0.04	0.1829	0.0136	0.1823	0.0202	0.0204	-0.0004	-0.0001	0.0000	0.003154
98.	4.	5.37	0.28	110.54	3.02	-0.04	0.2183	0.0130	0.2173	0.0245	0.0220	-0.0004	-0.0002 -0.0002	-0.0002 -0.0002	0.003176 0.003105
98.	5.	5.37	0.28	110.77	4.02	-0.04	0.2565	0.0121	0.2550	0.0300	0.0230	-0.0003 -0.0002	-0.0002	-0.0004	0.003107
98.	6.	5.36	0.28	110.66	4.54	-0.04 -0.04	0.2771 0.2990	0.0117 0.0113	0.2753 0.2968	0.0330	0.0250	-0.0004	-0.0004	-0.0002	0.003082
98.	7.	5.37 5.36	0.28 0.28	110.55 110.44	5.07 5.57	-0.04	0.3205	0.0115	0.3179	0.0426	0.0260	-0.0002	-0.0004	-0.0006	0.003087
98. 98.	8. 9.	5.35	0.28	109.99	6.08	-0.04	0.3473	0.0127	0.3440	0.0494	0.0280	0.0001	-0.0004	-0.0010	0.003064
98.	10.	5.35	0.28	110.12	7.07	-0.04	0.3925	0.0159	0.3875	0.0641	0.0388	-0.0002	-0.0006	-0.0004	0.003098
98.		5.35	0.28	110.37	8.03	-0.04	0.4391	0.0197	0.4320	0.0808	0.0520	-0.0007	-0.0005	0.0005	0.003097
98.	12.	5.35	0.28	110.15	9.01	-0.04	0.4834	0.0222	0.4740	0.0976	0.0628	-0.0004 0.0001	-0.0009 -0.0014	-0.0001 -0.0016	0.003117 0.003096
98.		5.35		110.29	10.02	-0.04	0.5311	0.0243	0.5187 0.6132	0.1163 0.1599	0.0738	0.0010	-0.0014	-0.0066	0.003082
98.		5.34		109.87	12.02	-0.04	0.6330 0.8385	0.0287 0.0375	0.7954	0.2680	0.0901	0.0052	-0.0034	-0.0144	0.002979
98.		5.33		109.52 110.35	16.06 20.02	-0.04 -0.04	1.0610	0.0472	0.9807	0.4077	0.2017	0.0112	-0.0216	-0.0339	0.002948
98.	16.	5.35	V.20	110.55	20.02	-0.07	1.0010	3.33.1.2					e: e · e		
99.	2.	5.59	0.28	109.96	-2.02	-0.04	0.0491	0.0145	0.0496	0.0128	0.0146	0.0001	-0.0001	-0.0002	0.001982
99.		5.58			0.00	-0.04	0.1115	0.0151	0.1115	0.0150	0.0174	-0.0003	-0.0002	-0.0003	0.001923
99.		5.57		110.08	2.09	-0.04	0.1827	0.0144	0.1821	0.0210	0.0202	-0.0003	-0.0001	-0.0005	0.001921 0.001894
99.		5.56			3.08	-0.04	0.2185	0.0134	0.2175	0.0251	0.0215 0.0227	-0.0004 -0.0002	-0.0001 -0.0002	-0.0004 -0.0006	0.001913
99.		5.56			4.06	-0.04	0.2577	0.0124 0.0119	0.2562 0.2715		0.0227	-0.0002	-0.0002	-0.0003	0.001925
99.		5.53			4.51 5.01	-0.04 -0.04	0.2733 0.2954	0.0119	0.2713		0.0250	0.0000		-0.0006	0.001856
99.		5.53 5.51			5.01 5.57	-0.04	0.3216	0.0127	0.3188	0.0439	0.0273	-0.0001		-0.0001	0.001941
99. 99.		5.50			5.99	-0.04	0.3396	0.0136	0.3363	0.0490	0.0306	0.0000		-0.0005	0.001909
99.		5.49			7.06	-0.04	0.3905	0.0168	0.3855		0.0414	-0.0001		-0.0005	0.001894
99.		5.50		110.25	8.10	-0.04	0.4407	0.0200	0.4335		0.0535	-0.0004		0.0002 -0.0001	0.001 887 0.001909
99.	. 13.	5.48	0.28	110.15	9.08	-0.04	0.4838	0.0222	0.4742	0.0982	0.0645	-0.0003	-0.0010	-0.0001	A.A.12A3

									•						
Run	Point	R	M	q	α	β	C _N	C _A	$C_{\hat{L}}$	$\mathbf{C}_{\mathbf{D}}$	C _m	G	C ₃	C _Y	$C_{\mathbf{q}}$
99 .	14.	5.48	0.28	110.17	10.03	-0.04	0.5290	0.0240	0.5167	0.1158	0.0744	0.0000	-0.0014	-0.0008	0.001872
99.	15.	5.49	0.28	110.79	12.03	-0.04	0.6293	0.0283	0.6096	0.1589	0.0963	0.0011	-0.0033	-0.0055	
99.	16.	5.47	0.28	110.44	16.04	-0.04	0.8307	0.0367	0.7882	0.2648	0.1469	0.0052	-0.0086	-0.0132	
99.	17.	5.48	0.28	110.92	20.01	-0.04	1.0574	0.0465	0.9776	0.4056	0.2010	0.0112	-0.0221	-0.0345	
100.	1.	5.43	0.28	110.53	-2.08	-0.04	0.0461	0.0131	0.0465	0.0114	0.0148	0.0001	-0.0001	0.0003	0.001152
100.	2.	5.40	0.28	109.61	0.08	-0.04	0.1122	0.0140	0.1122	0.0141	0.0179	-0.0002	-0.0002	0.0003	0.001158
100.	3.	5.40	0.28	109.73	2.09	-0.04	0.1814	0.0135	0.1808	0.0201	0.0208	-0.0003	-0.0001	0.0009	0.001091
100.	4.	5.40	0.28	109.85	3.03	-0.04	0.2145	0.0128	0.2135	0.0241	0.0222	-0.0003	-0.0001	0.0006	
100.	5.	5.41	0.28	110.08	4.01	-0.04	0.2543	0.0120	0.2528	0.0297	0.0235	-0.0002	-0.0002	0.0006	
100.	6.	5.40	0.28	110.09	4.50	-0.04	0.2729	0.0120	0.2711	0.0334	0.0248	-0.0003	-0.0003	0.0006	0.001143
100.	7.	5.41	0.28	110.32	5.10	-0.04	0.3019	0.0128	0.2996		0.0269	0.0000	-0.0003	0.0004	0.001114
100.	8.	5.39	0.28	109.98	5.30	-0.04	0.3200	0.0136	0.3172		0.0293	0.0000	-0.0003	0.0001	0.001115
100.	9.	5.40	0.28	110.22	6.06	-0.04	0.3465	0.0151	0.3430	0.0516	0.0338	-0.0003	-0.0004	0.0007	0.001033
100.	10.	5.40	0.28	110.46	7.04	-0.04	0.3926	0.0177	0.3875	0.0657	0.0430	0.0000	-0.0006	-0.0004	0.001081
100. 100.	11. 12.	5.40 5.40	0.28 0.28	110.60	8.05	-0.04	0.4372	0.0202	0.4301	0.0812	0.0536	-0.0002	-0.0008	0.0000	0.001082
100. 100.	13.	5.39	0.28	110.73 110.40	9.07	-0.04	0.4846	0.0225	0.4750	0.0986	0.0650	-0.0003	-0.0010	0.0001	0.001094
100.	14.	5.39	0.28	110.40	10.04 12.02	-0.04 -0.04	0.5304 0.6285	0.0244	0.5180	0.1165	0.0755	0.0003	-0.0015	-0.0012	0.001096
100.	15.	5.36	0.28	109.28	16.05	-0.04	0.8348	0.0284 0.0370	0.6088	0.1587	0.0962	0.0012	-0.0032	-0.0053	0.001028
100.	16.	5.40	0.28	111.04	20.09	-0.04	1.0608	0.0370	0.7921 0.9802	0.2664 0.4084	0.1478 0.2024	0.0053	-0.0086	-0.0132	0.001069
										0.4064	<u>-</u>	0.0115	-0.0218	-0.0333	0.001025
118.	3.	3.89	0.18	49.80	-1.96	0.00	0.0513	0.0149	0.0517	0.0132	0.0150	-0.0001	0.0000	-0.0004	0.002252
118.	4.	3.90	0.19	50.15	0.00	0.00	0.1090	0.0152	0.1090	0.0152	0.0177	-0.0004	-0.0002	-0.0008	0.002274
118. 118.	5. 6.	3.89 3.89	0.19 0.19	50.03 50.04	1.99 3.06	0.00	0.1767	0.0146	0.1761	0.0207	0.0208	-0.0007	-0.0001	-0.0007	0.002282
118.	7.	3.89	0.19	50.04	4.00	0.00 0.00	0.2163 0.2533	0.0138	0.2152	0.0253	0.0223	-0.0007	-0.0002	-0.0011	0.002329
118.	8.	3.88	0.18	49.92	4.51	0.00	0.2753	0.0133 0.0132	0.2517 0.2734	0.0309 0.0348	0.0246 0.0255	-0.0006	-0.0003	-0.0014	0.002281
118.	9.	3.89	0.19	50.27	5.03	0.00	0.2992	0.0132	0.2754	0.0348	0.0233	-0.0004 -0.0007	-0.0003 -0.0006	-0.0009 0.0000	0.002297 0.002223
118.	10.	3.89	0.19	50.27	5.54	0.00	0.3261	0.0149	0.3231	0.0463	0.0301	-0.0014	-0.0005	0.0009	0.002223
118.	11.	3.88	0.19	50.16	6.00	0.00	0.3452	0.0159	0.3416	0.0519	0.0354	-0.0010	-0.0005	0.0009	0.002201
118.	12.	3.88	0.19	50.17	7.01	0.00	0.3903	0.0180	0.3852	0.0655	0.0454	-0.0011	-0.0004	-0.0005	0.002308
118.	13.	3.88	0.19	50.17	8.01	0.00	0.4372	0.0202	0.4301	0.0810	0.0554	-0.0008	-0.0008	-0.0015	0.002309
118.	14.	3.87	0.18	49.84	9.03	0.00	0.4862	0.0223	0.4767	0.0984	0.0657	-0.0008	-0.0010	-0.0022	0.002245
118.	15.	3.86	0.18	49.73	9.98	0.00	0.5312	0.0240	0.5190	0.1157	0.0760	-0.0004	-0.0016	-0.0035	0.002232
118.	16.	3.87	0.18	49.98	12.00	0.00	0.6315	0.0275	0.6120	0.1581	0.0968	0.0008	-0.0034	-0.0071	0.002244
118.	17.	3.87	0.19	50.14	16.04	0.00	0.8393	0.0347	0.7971	0.2653	0.1468	0.0049	-0.0079	-0.0133	0.002225
118.	18.	3.86	0.18	49.97	20.01	0.00	1.0636	0.0437	0.9844	0.4050	0.2002	0.0047	-0.0100	-0.0167	0.002238
119.	1.	3.84	0.18	49.80	-2.02	0.00	0.0464	0.0133	0.0468	0.0116	0.0149	0.0000	-0.0001	0.0005	0.004709
119.	2.	3.84	0.18	49.80	-0.02	0.00	0.1072	0.0140	0.1072	0.0140	0.0178	-0.0005	-0.0002	0.0001	0.004770
119. 119.	3. 4.	3.84	0.19	50.03	2.01	0.00	0.1779	0.0135	0.1773	0.0197	0.0210	-0.0007	-0.0001	0.0005	0.004735
119.	4. 5.	3.84 3.85	0.18 0.19	49.92	3.04	0.00	0.2164	0.0128	0.2154	0.0242	0.0225	-0.0007	-0.0002	0.0001	0.004734
119.	6.	3.84	0.19	50.15 50.04	4.04 4.52	0.00 0.00	0.2543 0.2753	0.0122 0.0121	0.2528 0.2735	0.0301 0.0338	0.0245 0.0256	-0.0005	-0.0003	-0.0003	0.004679
119.	7.	3.84	0.18	49.93	5.00	0.00	0.2968	0.0121	0.2733	0.0338	0.0256	-0.0005 -0.0005	-0.0003 -0.0005	-0.0005	0.004686
119.	8.	3.84	0.19	50.04	5.50	0.00	0.3200	0.0124	0.3172	0.0332	0.0289	-0.0001	-0.0006	0.0004 0.0012	0.004680 0.004687
119.	9.	3.83	0.18	49.82	6.02	0.00	0.3463	0.0145	0.3429	0.0508	0.0239	-0.0012	-0.0007	0.0012	0.004627
119.	10.	3.84	0.19	50.17	7.03	0.00	0.3917	0.0170	0.3867	0.0648	0.0438	-0.0012	-0.0005	0.0021	0.004600
119.	11.	3.83	0.18	49.94	8.00	0.00	0.4358	0.0193	0.4289	0.0798	0.0545	-0.0010	-0.0007	0.0002	0.004670
119.	12.	3.83	0.18	49.84	8.99	0.00	0.4845	0.0216	0.4752	0.0970	0.0649	-0.0006	-0.0010	-0.0011	0.004625
119.	13.	3.83	0.19	50.07	10.02	0.00	0.5336	0.0235	0.5214	0.1160	0.0760	-0.0001	-0.0017	-0.0025	0.004616
119.	14.	3.83	0.18	49.98	12.01	0.00	0.6331	0.0269	0.6136	0.1580	0.0967	0.0009	-0.0035	-0.0063	0.004636
119.	15.	3.83	0.18	49.91	16.00	0.00	0.8407	0.0342	0.7987	0.2647	0.1469	0.0051	-0.0080	-0.0124	0.004598
119.	16.	3.82	0.18	49.97	20.00	0.00	1.0676	0.0439	0.9881	0.4065	0.1983	-0.0001	-0.0029	-0.0051	0.004567
120.	1.	3.80	0.18	49.80	-2.02	0.00	0.0497	0.0131	0.0501	0.0113	0.0148	0.0000	-0.0002	0.0007	0.006872
120.	2.	3.80	0.18	49.80	-0.02	0.00	0.1105	0.0139	0.1105	0.0138	0.0177	-0.0003	-0.0003	0.0005	0.006832
120.	3.	3.80	0.18	49.80	2.03	0.00	0.1813	0.0135	0.1807	0.0199	0.0208	-0.0005	-0.0002	0.0007	0.006773
120. 120.	4. 5	3.80	0.18	49.92	3.04	0.00	0.2188	0.0127	0.2178	0.0243	0.0222	-0.0006	-0.0003	0.0003	0.006800
120. 120.	5. 6	3.80	0.18	49.81 50.29	4.05	0.00	0.2581	0.0122	0.2566	0.0303	0.0241	-0.0004	-0.0004	0.0001	0.006779
120. 120.	6. 7.	3.82 3.79	0.19 0.18	50.38 40.58	4.52	0.00	0.2761	0.0118	0.2743	0.0336	0.0249	-0.0005	-0.0004	-0.0003	0.006728
120.	7. 8.	3.81	0.19	49.58 50.04	4.99 5.48	0.00 0.00	0.2998 0.3210	0.0121	0.2976	0.0381	0.0260	-0.0002	-0.0005	-0.0003	0.006779
120.	9.	3.80	0.19	49.93	5.48 6.02	0.00	0.3433	0.0127 0.0135	0.31 83 0.3400	0.0433 0.0495	0.0277	0.0002	-0.0007	0.0004	0.006656
-200	٠.		· · · · · ·	47.73	U.U2	0.00	, C.C. P	ÿ.V133	V-3400	U.U473	0.0322	0.0000	-0.0008	0.0010	0.006749

Run	Point	R	М	q	α	β 	C _N	C _A	c_{L}	$c_{\mathtt{D}}$	C _m	G	C _n	C _Y	, Cq
120.	10.	3.80	0.18	49.94	7.02	0.00	0.3935	0.0166	0.3885	0.0645	0.0422	-0.0014	-0.0006	0.0027	0.006702
120.	11.	3.80	0.19	50.06	8.04	0.00	0.4398	0.0189	0.4328	0.0802	0.0535	-0.0011	-0.0007	0.0005	0.006620
120.	12.	3.80	0.18	49.95	9.03	0.00	0.4867	0.0213	0.4773	0.0975	0.0644	-0.0008	-0.0010	-0.0006	0.006682
120.	13.	3.79	0.18	49.85	10.03	0.00	0.5361	0.0236	0.5238	0.1167	0.0758	-0.0002	-0.0017	-0.0025	0.006644
120.	14.	3.79	0.18	49.86	12.02	0.00	0.6360	0.0272	0.6164	0.1590	0.0964	0.0009	-0.0035	-0.0062	0.006654
120.	15.	3.79 3.80	0.18 0.18	49.91 49.97	15.99 20.03	0.00	0.8376 1.0694	0.0343	0.7957 0.9897	0.2637 0.4075	0.1455 0.2008	0.0047 0.0043	-0.0077 -0.0095	-0.0122 -0.0152	0.006611 0.006556
120.	16.	3.60	0.10	47.71						0.4073	0.2006				
121.	1.	3.79	0.18	49.92	-2.03	0.00	0.0495	0.0134	0.0499	0.0116	0.0145	0.0000	-0.0003	0.0001	0.008293
121.	2.	3.79	0.18	49.92	-0.01	0.00	0.1117	0.0143	0.1117	0.0143	0.0176	-0.0004	-0.0003	0.0003	0.008206
121.	3.	3.79	0.19	50.04 50.04	1.98 2.99	0.00 0.00	0.1806 0.2180	0.0139 0.0131	0.1800 0.2170	0.0201 0.0245	0.0205 0.0219	-0.0005 -0.0006	-0.0003 -0.0004	0.0003 -0.0004	0.008148 0.008160
121. 121.	4. 5.	3.79 3.79	0.19 0.19	50.04	4.00	0.00	0.2569	0.0131	0.2554	0.0302	0.0219	-0.0004	-0.0004	-0.0004	0.008152
121.	6.	3.78	0.13	49.92	4.53	0.00	0.2780	0.0121	0.2762	0.0340	0.0248	-0.0005	-0.0004	-0.0009	0.008163
121.	7.	3.79	0.19	50.16	4.97	0.00	0.2973	0.0121	0.2951	0.0378	0.0256	-0.0002	-0.0003	-0.0009	0.008182
121.	8.	3.79	0.19	50.04	5.51	0.00	0.3248	0.0127	0.3221	0.0438	0.0267	-0.0001	-0.0007	-0.0005	0.008151
121.	9.	3.79	0.19	50.05	6.03	0.00	0.3481	0.0134	0.3448	0.0499	0.0299	-0.0004	-0.0009	0.0004	0.008122
121.	10.	3.79	0.19	50.17	6.98	0.00	0.3925	0.0162	0.3876	0.0638	0.0411	-0.0016	-0.0008	0.0031	0.008139
121.	11.	3.78	0.19	50.06	8.00	0.00	0.4354	0.0182	0.4287	0.0786	0.0506	-0.0014	-0.0008	0.0019	0.008146
121.	12.	3.78	0.19	50.07	8.99	0.00	0.4849 0.5333	0.0211	0.4757	0.0967	0.0628 0.0749	-0.0010 0.0000	-0.0009 -0.0017	-0.0001 -0.0027	0.008146 0.008020
121.	13.	3.78	0.18 0.18	49.96 49.86	9.98 12.04	0.00	0.5353	0.0235 0.0273	0.5212 0.6172	0.1156 0.1595	0.0749	0.0008	-0.0017	-0.0027	0.008020
121. 121.	14. 15.	3.77 3.76	0.18	49.86 49.56	15.99	0.00	0.8433	0.0273	0.8011	0.1393	0.1462	0.0048	-0.0081	-0.0130	0.007960
121.	16.	3.79	0.19	50.32	20.05	0.00	1.0641	0.0436	0.9847	0.4058	0.2003	0.0070	-0.0123	-0.0194	0.007854
122.	2.	3.76	0.18	49.57	-2.02	0.00	0.0502	0.0133	0.0506	0.0115	0.0144	0.0001	-0.0004	-0.0002	0.011499 0.011467
122. 122.	3. 4.	3.77 3.77	0.18 0.18	49.92 49.92	-0.01 1.98	0.00 0.00	0.1123 0.1804	0.0141 0.0137	0.1123 0.1798	0.0141 0.0200	0.0173 0.0202	-0.0003 -0.0005	-0.0005 -0.0004	-0.0005 -0.0003	0.011467
122.	4 . 5.	3.77	0.18	49.92	3.03	0.00	0.2198	0.0130	0.2188	0.0246	0.0202	-0.0006	-0.0005	-0.0008	0.011345
122.	5. 6.	3.78	0.19	50.16	4.00	0.00	0.2569	0.0123	0.2554	0.0302	0.0231	-0.0003	-0.0005	-0.0008	0.011278
122	7.	3.77	0.19	50.04	4.50	0.00	0.2776	0.0119	0.2758	0.0337	0.0241	-0.0005	-0.0005	-0.0013	0.011310
122	8.	3.78	0.19	50.16	5.02	0.00	0.2989	0.0117	0.2967	0.0378	0.0253	-0.0001	-0.0006	-0.0019	0.011285
122	9.	3.78	0.19	50.16	5.49	0.00	0.3217	0.0121	0.3191	0.0428	0.0259	-0.0002	-0.0007	-0.0016	0.011193
122	10.	3.78	0.19	50.28	5.99	0.00	0.3453	0.0125	0.3422	0.0484	0.0278	0.0005	-0.0010	-0.0006	0.011183
122.	11.	3.78	0.19	50.17	7.01	0.00	0.3914	0.0153	0.3866	0.0630	0.0385	-0.0013	-0.0010	0.0031	0.011200
122.	12.	3.77	0.19	50.06	8.02	0.00	0.4385	0.0176	0.4317	0.0787	0.0494	-0.0014	-0.0008	0.0019	0.0111 72 0.011207
122. 122.	13. 14.	3.76 3.77	0.1 8 0.1 8	49.84 49.96	8.99 10.07	0.00 0.00	0.4844 0.5391	0.0202 0.0233	0.4753 0.5267	0.0956 0.1172	0.0603 0.0748	-0.0012 -0.0002	-0.0009 -0.0018	0.0002 -0.0029	0.011207
122.	15.	3.77	0.18	49.87	12.02	0.00	0.6361	0.0269	0.6165	0.1172	0.0951	0.0010	-0.0013	-0.0023	0.011170
122	15. 16.	3.77	0.18	50.03	16.02	0.00	0.8413	0.0209	0.7991	0.2653	0.1449	0.0051	-0.0082	-0.0132	0.011008
122.	17.	3.78	0.19	50.43	20.02	0.00	1.0631	0.0435	0.9839	0.4049	0.1993	0.0060	-0.0113	-0.0179	0.010844
124.	2.	3.82	0.19	50.27	-2.00	0.00	0.0483	0.0164	0.0489	0.0147	0.0140	0.0000	-0.0004	0.0003	0.031040
124.	3.	3.82	0.19	50.27	0.02	0.00	0.1089	0.0169	0.1089	0.0169	0.0166	-0.0003	-0.0006	-0.0002	0.030829
124.	4.	3.80	0.19	50.04	2.03	0.00	0.1795	0.0162	0.1788	0.0226	0.0198	-0.0006	-0.0005	-0.0003	0.030883
124.	5.	3.81	0.19	50.16	3.02	0.00	0.2155	0.0156	0.2144	0.0270	0.0210	-0.0007	-0.0006	0.0000	0.030546
124.	6.	3.80	0.19	50.04	4.04	0.00	0.2549	0.0147	0.2532	0.0326	0.0224	-0.0005	-0.0008	-0.0001	0.030566
124.	7.	3.79	0.19	50.05	4.54	0.00	0.2759	0.0142	0.2739	0.0360 0.0389	0.0227 0.0242	-0.0006 -0.0002	-0.000 9 -0.0011	0.0000	0.0303 89 0.030415
124. 124.	8. 9.	3.78 3.79	0.19 0.19	49.93 50.28	5.02 5.52	0.00 0.00	0.2927 0.3141	0.0134 0.0129	0.2904	0.0389	0.0242	-0.0002	-0.0011	0.0003	0.030295
124.	10.	3.79	0.19	50.16	6.02	0.00	0.3380	0.0129	0.3348	0.0482	0.0252	0.0001	-0.0016	0.0013	0.029909
124.	11.	3.78	0.19	49.94	7.02	0.00	0.3856	0.0135	0.3811	0.0605	0.0278	-0.0005	-0.0016	0.0011	0.029919
124.	12.	3.78	0.19	50.06	8.00	0.00	0.4292	0.0151	0.4229	0.0747	0.0372	-0.0009	-0.0017	-0.0007	0.029816
124.	13.	3.77	0.18	49.84	9.03	0.00	0.4766	0.0167	0.4680	0.0913	0.0464	-0.0005	-0.0017	-0.0023	0.029843
124.	14.	3.77	0.19	49.96	10.06	0.00	0.5267	0.0197	0.5151	0.1114	0.0612	0.0008	-0.0021	-0.0045	0.029741
124.	15.	3.77	0,18	49.86	12.00	0.00	0.6237	0.0237	0.6052	0.1529	0.0819	0.0020	-0.0039	-0.0092	0.029673
124.	16.	3.77	0.19	50.14	16.00	0.00	0.8356	0.0321	0.7944	0.2612	0.1329	0.0064	-0.0088	-0.0160	0.029127
124.	17.	3.76	0.18	49.86	19.99	0.00	1.0607	0.0438	0.9819	0.4037	0.1961	0.0052	-0.0101	-0.0154	0.029780
125.	1.	3.77	0.19	50.27	-2.01	0.00	0.0476	0.0144	0.0481	0.0127	0.0144	0.0001	-0.0003	0.0003	0.026958
125.	2.	3.76	0.19	50.04	0.02	0.00	0.1081	0.0152	0.1081	0.0152	0.0173	-0.0004	-0.0004	0.0003	0.026602
125.	3.	3.77	0.19	50.38	2.03	0.00	0.1788	0.0146	0.1782	0.0209	0.0202	-0.0005	-0.0004	0.0005	0.026546
125.	4. 5	3.77	0.19	50.15 50.16	3.02	0.00	0.2151	0.0138	0.2141	0.0251 0.0306	0.0217 0.0230	-0.0007 -0.0005	-0.0005 -0.0006	0.0003	0.026609 0.026414
125. 125.	5. 6.	3.77 3.77	0.19 0.19	50.16 50.27	4.01 4.53	0.00 0.00	0.2532 0.2748	0.0129 0.0126	0.2517	0.0342	0.0236	-0.0005	-0.0008	0.0009	0.026406
120.	U.	J	0.17	30.41	4	J.00	VIZ / 40		J. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	J 74	4.0200	5.0000			

Run	Point	R	М	q	α .	β	C _N	C _A	C_L	CD	C _m	C _i	C _a	$\mathbf{c}_{\mathtt{Y}}$	$C_{\mathbf{q}}$
125.	7.	3.76	0.19	50.16	5.03	0.00	0.2939	0.0122	0.2917	0.0379	0.0249	-0.0003	-0.0010	0.0011	0.026458
125.	8.	3.76	0.19	50.05	5.51	0.00	0.3138	0.0121	0.3112	0.0421	0.0257	-0.0001	-0.0012	0.0016	0.026191
125.	9.	3.76	0.19	50.05	6.01	0.00	0.3381	0.0117	0.3350	0.0470	0.0258	0.0001	-0.0014	0.0020	0.026152
125.	10.	3.76	0.19	50.28	7.04	0.00	0.3849	0.0128	0.3804	0.0599	0.0305	-0.0006	-0.0014	0.0011	0.025941
125.	11.	3.76	0.19	50.17	8.00	0.00	0.4295	0.0145	0.4233	0.0741	0.0385	-0.0006	-0.0014	-0.0005	0.025840
125.	12.	3.75	0.19	49.95	9.06	0.00	0.4791	0.0165	0.4705	0.0917	0.0481	-0.0004	-0.0014	-0.0023	0.025857
125.	13.	3.75	0.19	50.08	10.06	0.00	0.5266	0.0197	0.5151	0.1114	0.0631	0.0008	-0.0020	-0.0042	0.025845
125.	14.	3.74	0.18	49.86	12.05	0.00	0.6290	0.0239	0.6102	0.1547	0.0855	0.0023	-0.0041	-0.0088	0.025605
125.	15.	3.76	0.19	50.37	16.04	0.00	0.8371	0.0342	0.7951	0.2641	0.1425	0.0049	-0.0076	-0.0116	0.025908
125.	16.	3.77	0.19	50.55	20.02	0.00	1.0608	0.0443	0.9815	0.4048	0.1982	0.0045	-0.0094	-0.0151	0.025585
126.	1.	3.75	0.19	50.03	-2.01	0.00	0.0480	0.0146	0.0485	0.0129	0.0147	0.0000	-0.0001	0.0002	0.017907
126. 126.	2. 3.	3.75	0.19	50.15 50.50	0.01 2.02	0.00 0.00	0.1110 0.1797	0.0153	0.1110 0.1791	0.0153 0.0212	0.0176 0.0206	-0.0003	-0.0002	0.0004	0.017911
126.	3. 4.	3.76 3.75	0.19 0.19	50.27	3.00	0.00	0.1797	0.0148 0.0141	0.1791	0.0212	0.0221	-0.0005 -0.0007	-0.0002 -0.0003	0.0007 0.0004	0.017774 0.017761
126.	5 .	3.75	0.19	50.27	4.07	0.00	0.2575	0.0141	0.2559	0.0255	0.0234	-0.0007	-0.0005	0.0004	0.017761
126.	5. 6.	3.75	0.19	50.27	4.51	0.00	0.2758	0.0133	0.2739	0.0345	0.0239	-0.0005	-0.0006	0.0010	0.017621
126.	7.	3.75	0.19	50.27	5.02	0.00	0.2962	0.0126	0.2939	0.0385	0.0252	-0.0002	-0.0009	0.0010	0.017021
126.	8.	3.76	0.19	50.39	5.51	0.00	0.3165	0.0124	0.3138	0.0427	0.0260	-0.0002	-0.0011	0.0015	0.017181
126.	9.	3.74	0.19	50.05	6.04	0.00	0.3416	0.0123	0.3384	0.0482	0.0266	-0.0002	-0.0013	0.0014	0.017445
126.	10.	3.75	0.19	50.17	6.99	0.00	0.3879	0.0140	0.3833	0.0611	0.0317	-0.0012	-0.0011	-0.0002	0.017253
126.	11.	3.74	0.19	49.94	8.04	0.00	0.4348	0.0163	0.4282	0.0769	0.0419	-0.0001	-0.0012	-0.0027	0.017062
126.	12	3.75	0.19	50.30	9.05	0.00	0.4802	0.0197	0.4712	0.0950	0.0558	-0.0001	-0.0014	-0.0022	0.017119
126.	13.	3.74	0.19	50.07	10.02	0.00	0.5297	0.0210	0.5180	0.1129	0.0644	0.0003	-0.0017	-0.0036	0.017028
126.	14.	3.75	0.19	50.19	10.02	0.00	0.5265	0.0209	0.5148	0.1122	0.0641	0.0002	-0.0017	-0.0030	0.017084
126.	15.	3.74	0.19	50.09	12.01	0.00	0.6309	0.0267	0.6115	0.1574	0.0908	0.0020	-0.0041	-0.0083	0.017185
126.	16.	3.75	0.19	50.37	16.05	0.00	0.8422	0.0357	0.7995	0.2672	0.1460	0.0049	-0.0079	-0.0127	0.017398
126.	17.	3.73	0.18	49.74	20.05	0.00	1.0653	0.0445	0.9855	0.4070	0.1993	0.0054	-0.0104	-0.0168	0.017297
127.	1.	3.75	0.19	50.26	-2.01	0.00	0.0498	0.0142	0.0503	0.0125	0.0148	-0.0002	-0.0001	0.0001	0.008654
127.	2.	3.73	0.19	49.92	0.00	0.00	0.1111	0.0152	0.1111	0.0152	0.0177	-0.0004	-0.0002	0.0002	0.008807
127.	3.	3.73	0.19	49.92	2.07	0.00	0.1822	0.0146	0.1815	0.0212	0.0208	-0.0007	-0.0002	0.0004	0.008900
127.	4.	3.74	0.19	50.04	3.02	0.00	0.2176	0.0141	0.2165	0.0255	0.0221	-0.0007	-0.0002	0.0005	0.008496
127.	5.	3.73	0.18	49.81	4.02	0.00	0.2569	0.0133	0.2553	0.0313	0.0237	-0.0004	-0.0005	0.0000	0.008712
127.	6.	3.73	0.19	49.92	4.51	0.00	0.2774	0.0131	0.2755	0.0348	0.0243	-0.0004	-0.0006	0.0002	0.008653
127.	7.	3.73	0.19	49.93	5.06	0.00	0.3003	0.0130	0.2979	0.0394	0.0258	-0.0001	-0.0006	-0.0004	0.008674
127.	8.	3.73	0.18	49.81	5.49	0.00	0.3244	0.0136	0.3216	0.0446	0.0264	-0.0005	-0.0005	-0.0015	0.008708
127.	9.	3.74	0.19	50.05	6.03	0.00	0.3476	0.0146	0.3441	0.0510	0.0299	0.0002	-0.0003	-0.0034	0.008624
127.	10.	3.73	0.19	49.94 49.94	7.03	0.00	0.3918	0.0168	0.3868	0.0646	0.0394	0.0002	-0.0008 -0.0013	-0.0042 -0.0039	0.008539 0.008419
127. 127.	11. 12.	3.73 3.74	0.19 0.19	50.07	8.01 9.00	0.00 0.00	0.4367 0.4854	0.0194 0.0224	0.4298	0.0800 0.0981	0.0509 0.0633	0.0001 0.0001	-0.0013	-0.0034	0.008419
					10.04	0.00	0.5335	0.0248		0.0381	0.0754	0.0001	-0.0020	-0.0041	0.008708
127. 127.	13. 14.	3.73 3.73	0.19 0.18	49.96 49.86	12.00	0.00	0.6318	0.0282	0.5210 0.6121	0.1589	0.0953	0.0002	-0.0035	-0.0068	0.008708
127.	15	3.74	0.19	50.02	16.00	0.00	0.8371	0.0355	0.7949	0.2649	0.1441	0.0050	-0.0079	-0.0125	0.008636
127.	16.	3.72	0.18	49.62	20.00	0.00	1.0661	0.0450	0.9864	0.4069	0.1982	0.0024	-0.0067	-0.0113	0.008564
129.	1.	3.89	0.19	50.61	-2.06	0.00	0.0480	0.0176	0.0486	0.0158	0.0140	-0.0001	-0.0003	-0.0002	0.013896
129.	2.	3.88	0.19	50.27	-0.06	0.00	0.1080	0.0180	0.1081	0.0179	0.0168	-0.0004	-0.0005	-0.0008	0.013916
129.	3.	3.87	0.19	50.27	2.10	0.00	0.1833	0.0174	0.1825	0.0241	0.0197	-0.0005	-0.0003	-0.0012	0.013725
129.	4.	3.87	0.19	50.27	3.05	0.00	0.2191	0.0166	0.2179	0.0282	0.0208	-0.0007	-0.0005	-0.0017	0.013775
129.	5.	3.87	0.19	50.16	4.01	0.00	0.2576	0.0156	0.2559	0.0335	0.0214	-0.0004	-0.0004	-0.0017	0.013710
129.	6.	3.86	0.19	50.16	4.50	0.00	0.2756	0.0147	0.2736	0.0363	0.0218	-0.0006	-0.0005	-0.0023	0.013661
129.	7.	3.86	0.19	50.16	5.00	0.00	0.2967	0.0142	0.2944	0.0401	0.0229	0.0001	-0.0006	-0.0025	0.013718
129.	8.	3.86	0.19	50.16	5.55	0.00	0.3229	0.0141	0.3200	0.0453	0.0231	-0.0001	-0.0007	-0.0025	0.013658
129.	9.	3.85	0.19	50.16	6.03	0.00	0.3456	0.0143	0.3422	0.0505	0.0236	0.0004	-0.0007	-0.0034	0.013627
129.	10.	3.86	0.19	50.17	7.03	0.00	0.3894	0.0147	0.3847	0.0622	0.0269	0.0004	-0.0012	-0.0031	0.013558
129.	11.	3.86	0.19	50.40	8.04	0.00	0.4300	0.0154	0.4236	0.0754	0.0352	0.0005	-0.0014	-0.0049	0.013449
129.	12.	3.85	0.19	50.07	9.03	0.00	0.4742	0.0161	0.4658	0.0904	0.0427	0.0008	-0.0018	-0.0053	0.013422
129.	13.	3.86	0.19	50.30	10.02	0.00	0.5162	0.0165	0.5055	0.1060	0.0508	0.0006	-0.0021	-0.0055	0.013291
129.	14.	3.85	0.19	50.20	12.04	0.00	0.6155	0.0174	0.5983	0.1455	0.0669	0.0032	-0.0039	-0.0093	0.013117
129.	15.	3.84	0.19	50.02	16.07	0.00	0.8406	0.0292	0.7996	0.2607	0.1216	-0.0007	-0.0036	-0.0039	0.013409
129.	16.	3.81	0.18	49.28	20.01	0.00	1.0648	0.0438	0.9856	0.4055	0.1974	0.0064	-0.0112	-0.0192	0.013310
130. 130.	1. 2.	3.85 3.85	0.19 0.19	50.38 50.27	-2.09 -0.04	0.00 0.00	0.0452 0.1070	0.0157 0.0162	0.0458 0.1070	0.0140 0.0162	0.0144 0.0174	-0.0002 -0.0005	-0.0001 -0.0004	-0.0002 -0.0004	0.011664 0.011592

Run	Point	R	М	q	α	β L	C _N	C _A	c_{L}	CD	_ C	G	C _n	C _Y	Cq
							#27 Mar:			0.0001			0.0002	0.0000	0.011579
130.	3.	3.84	0.19	50.27	2.05	0.00	0.1787	0.0157	0.1780 0.2126	0.0221 0.0261	0.0207 0.0223	-0.0007 -0.0011	-0.0003 -0.0003	-0.0002 0.0000	0.0115/9
130.	4.	3.84	0.19	50.27	3.02 4.00	0.00 0.00	0.2137 0.2540	0.0149 0.0145	0.2128	0.0201	0.0223	-0.0010	-0.0004	0.0012	0.011532
130.	5.	3.84 3.84	0.19 0.19	50.16 50.16	4.56	0.00	0.2782	0.0145	0.2761	0.0366	0.0252	-0.0012	-0.0010	0.0027	0.011556
130. 130.	6. 7.	3.84	0.19	50.16	5.05	0.00	0.2982	0.0145	0.2958	0.0407	0.0268	-0.0011	-0.0012	0.0039	0.011570
130.	8.	3.83	0.19	50.05	5.57	0.00	0.3224	0.0148	0.3194	0.0460	0.0282	-0.0022	-0.0013	0.0044	0.011429
130.	9.	3.84	0.19	50.16	6.03	0.00	0.3440	0.0151	0.3405	0.0511	0.0299	-0.0018	-0.0012	0.0039	0.011445
130.	10.	3.83	0.19	50.05	7.04	0.00	0.3891	0.0153	0.3843	0.0629	0.0333	-0.0019	-0.0014	0.0038	0.011448
130.	11.	3.84	0.19	50.17	8.07	0.00	0.4307	0.0160	0.4242	0.0763	0.0413	-0.0013	-0.0012	0.0012	0.011434
130.	12.	3.83	0.19	50.18	9.08	0.00	0.4742	0.0165	0.4657	0.0912	0.0489	-0.0011 -0.0005	-0.0013 -0.0019	-0.0003 -0.0016	0.011325 0.011309
130.	13.	3.83	0.19	49.96	10.07	0.00	0.5199	0.0166	0.5090 0.5953	0.1073 0.1451	0.0564 0.0730	0.0009	-0.0019	-0.0060	0.011197
130. 130.	14. 15.	3.82 3.82	0.18 0.18	49.86 49.80	12.02 16.07	0.00 0.00	0.6125 0.8426	0.0179 0.0340	0.3933	0.2660	0.0730	0.0043	-0.0080	-0.0120	0.011217
130.	16.	3.80	0.18	49.28	20.03	0.00	1.0650	0.0441	0.9855	0.4061	0.2018	0.0062	-0.0113	-0.0172	0.011112
150.	10.	2.00	0												
131.	1.	3.82	0.19	50.03	-2.01	0.00	0.0456	0.0151	0.0461	0.0135	0.0145	0.0000	0.0000	0.0004	0.009763
131.	2.	3.82	0.19	49.92	0.10	0.00	0.1099	0.0158	0.1099	0,0160	0.0177	-0.0004	-0.0002	0.0004	0.009750
131.	3.	3.82	0.19	49.92	2.01	0.00	0.1762	0.0153	0.1756	0.0215	0.0210	-0.0008	-0.0001	0.0011	0.009689
131.	4.	3.82	0.19	49.92	3.02	0.00	0.2146	0.0148	0.2135	0.0261	0.0231	-0.0012	-0.0003 -0.0005	0.0015 0.0022	0.009690 0.009673
131.	5.	3.82	0.19	49.92	4.05	0.00 0.00	0.2560 0.2780	0.0143 0.0145	0.2543	0.0324	0.0251 0.0257	-0.0013 -0.0013	-0.0003	0.0022	0.009627
131.	6. 7.	3.81 3.82	0.18 0.19	49.81 50.04	4.50 5.04	0.00	0.3001	0.0145	0.276	0.0408	0.0277	-0.0013	-0.0012	0.0049	0.009645
131. 131.	7. 8.	3.81	0.19	49.93	5.50	0.00	0.3215	0.0148	0.3186	0.0455	0.0289	-0.0022	-0.0012	0.0050	0.009426
131.	9.	3.82	0.19	50.05	6.01	0.00	0.3437	0.0152	0.3402	0.0511	0.0304	-0.0020	-0.0011	0.0046	0.009513
131.	10.	3.82	0.19	50.05	7.03	0.00	0.3889	0.0154	0.3840	0.0629	0.0340	-0.0021	-0.0012	0.0047	0.009519
131.	11.	3.82	0.18	49.94	8.09	0.00	0.4349	0.0163	0.4282	0.0773	0.0428	-0.0013	-0.0012	0.0017	0.009472
131.	12.	3.84	0.19	50.64	9.09	0.00	0.4795	0.0171	0.4708	0.0927	0.0488	-0.0007	-0.0013	0.0010	0.009348
131.	13.	3.82	0.19	50.19	10.04	0.00	0.5246	0.0176	0.5135	0.1088	0.0560	-0.0001	-0.0017	-0.0003	0.009369
131.	14.	3.82	0.18	49.98	12.03	0.00	0.6239	0.0232	0.6054	0.1527	0.0849	-0.0018 0.0052	-0.0016 -0.0084	0.0006 -0.0125	0.009462 0.009230
131.	15.	3.81	0.18	49.91	16,04	0.00	0.8415 1.0639	0.0355 0.0443	0.7989 0.9839	0.2667 0.4073	0.1459 0.2023	0.0032	-0.0034	-0.0200	0.009184
131.	16.	3.83	0.19	50.32	20.11	0.00	1.0039	0.0443	0.7637	0.4073	0.2023	0.0000	-0.0150	-0.0200	0.007401
132.	1.	3.82	0.19	50.15	-2.10	0.00	0.0457	0.0153	0.0462	0.0137	0.0146	0.0000	0.0000	0.0010	0.006154
132	2.	3.82	0.19	50.03	0.09	0.00	0.1126	0.0161	0.1125	0.0162	0.0178	-0.0003	-0.0002	0.0008	0.006170
132	3.	3.82	0.19	50.15	2.08	0.00	0.1802	0.0156	0.1795	0.0221	0.0219	-0.0009	-0.0001	0.0016	0.006163
132.	4.	3.81	0.18	49.92	3.04	0.00	0.2173	0.0151	0.2162	0.0266	0.0235	-0.0011	-0.0002	0.0019	0.006148
132	5.	3.81	0.18	49.81	4.08	0.00	0.2583	0.0146	0.2567	0.0329	0.0252	-0.0010	-0.0003	0.0025	0.006117
132.	6.	3.82	0.19	50.27	4.50	0.00	0.2759	0.0143	0.2739	0.0359	0.0257	-0.0014	-0.0003	0.0030	0.006058 0.006085
132.	7.	3.82	0.19	50.04	5.57	0.00	0.3251 0.3010	0.0146 0.0144	0.3221 0.2985	0.0461 0.0411	0.0275 0.0269	-0.0011 -0.0007	-0.0005 -0.0005	0.0040 0.0037	0.005933
132.	8. 9.	3.82	0.19 0.19	50.16 50.16	5.09 6.00	0.00 0.00	0.3010	0.0144	0.2983	0.0411	0.0290	-0.0007	-0.0003	0.0037	0.005939
132. 132.	9. 10.	3.82 3.82	0.19	50.16	7.06	0.00	0.3859	0.0151	0.3409	0.0634	0.0375	-0.0035	-0.0006	0.0027	0.005998
132	11.	3.82	0.19	50.17	8.02	0.00	0.4304	0.0174	0.4237	0.0773	0.0448	-0.0019	-0.0009	0.0010	0.006004
132	12.	3.82	0.19	50.07	9.04	0.00	0.4811	0.0210	0.4719	0.0964	0.0601	-0.0024	-0.0004	0.0006	0.006099
132.	13.	3.81	0.18	49.84	10.07	0.00	0.5328	0.0228	0.5206	0.1156	0.0704	-0.0018	-0.0009	0.0001	0.006051
132.	14.	3.81	0.18	49.98	12.04	0.00	0.6301	0.0279	0.6105	0.1587	0.0952	0.0000	-0.0033	-0.0052	0.005927
132.	15.	3.82	0.19	50.26	16.07	0.00	0.8407	0.0358	0.7980	0.2671	0.1459	0.0047	-0.0079 -0.0117	-0.0114 -0.0170	0.005942 0.005828
132	16.	3.82	0.19	50.20	20.06	0.00	1.0633	0.0447	0.9835	0.4067	0.2017	0.0062	-0.0117	-0.0170	0.003628
122	,	2 00	0.18	49.80	-2.01	0.00	0.0462	0.0150	0.0467	0.0134	0.0145	0.0000	0.0000	0.0009	0.003287
133. 133.	1. 2.	3.80 3.80	0.18	49.80	-2.01	0.00	0.1077	0.0157	0.1078	0.0157	0.0178	-0.0004	-0.0002	0.0006	0.003275
133.	3.	3.83	0.19	50.38	2.03	0.00	0.1776	0.0154	0.1770	0.0216	0.0217	-0.0009	-0.0001	0.0015	0.003182
133.	4.	3.82	0.19	50.27	3.08	0.00	0.2178	0.0149	0.2167	0.0266	0.0237	-0.0011	-0.0002	0.0020	0.003234
133.	5.	3.82	0.19	50.27	4.06	0.00	0.2562	0.0145	0.2545	0.0326	0.0255	-0.0012	-0.0002	0.0027	0.003214
133.	6.	3.81	0.18	49.92	4.51	0.00	0.2764	0.0145	0.2744	0.0362	0.0264	-0.0014	-0.0003	0.0031	0.003260
133.	7.	3.82	0.19	50.27	5.01	0.00	0.2986	0.0147	0.2962	0.0407	0.0278	-0.0007	-0.0004 -0.0004	0.0038 0.0034	0.003274 0.003250
133.	8.	3.82	0.19	50.16	5.57	0.00	0.3265 0.3471	0.015 4 0.0161	0.3234 0.3435	0.0471 0.0527	0.0293 0.031 8	-0.0008 -0.0011	-0.0005	0.0034	0.003230
133.	9. 10	3.82 3.81	0.19 0.19	50.28 50.05	6.07 7.00	0.00 0.00	0.3471	0.0179	0.3820	0.0527	0.0425	-0.0028	-0.0004	0.0003	0.003194
133. 133.	10. 11.	3.82	0.19	50.05	8.02	0.00	0.4353	0.0207	0.4281	0.0812	0.0535	-0.0023	-0.0004	0.0008	0.003215
133.	12.	3.81	0.19	50.07	9.05	0.00	0.4846	0.0226	0.4750	0.0986	0.0640	-0.0012	-0.0010	-0.0006	0.003189
133.	13.	3.81	0.18	49.96	10.02	0.00	0.5309	0.0250	0.5185	0.1170	0.0762	-0.0005	-0.0018	-0.0018	0.003127
133.	14.	3.81	0.18	49.86	12.07	0.00	0.6388	0.0287	0.6186	0.1617	0.0969	0.0006	-0.0035	-0.0055	0.003187
133.	15.	3.80	0.18	49.86	12.07	0.00	0.6372	0.0287	0.6171	0.1613	0.0968	0.0008	-0.0035	-0.0052	0.003184
133.	16.	3.82	0.19	50.25	16.02	0.00	0.8389	0.0359	0.7964	0.2660	0.1455	0.0044	-0.0076	-0.0106	0.003131

Run	Point	R	M	q	α	β	C _N	C _A	C_L	CD	Cm	q	C _n	CY	Cq
133.	17.	3.81	0.18	49.97	20.03	0.00	1.0639	0.0446	0.9843	0.4063	0.2021	0.0066	-0.0122	-0.0176	0.003141
140.	2.	3.90	0.19	50.38	-2.04	0.00	0.0488	0.0166	0.0493	0.0149	0.0141	0.0000	-0.0003	-0.0005	0.013605
140.	3.	3.90	0.19	50.38	0.06	0.00	0.1133	0.0172	0.1132	0.0173	0.0171	-0.0004	-0.0004	-0.0011	0.013590
140.	4.	3.89	0.19	50.27	2.04	0.00	0.1828	0.0166	0.1821	0.0231	0.0200	-0.0006	-0.0004	-0.0013	0.013358
140.	5.	3.89	0.19	50.27	3.04	0.00	0.2191	0.0156	0.2180	0.0272	0.0210	-0.0006	-0.0004	-0.0014	0.013379
140.	6.	3.88	0.19	50.16	4.01	0.00	0.2565	0.0145	0.2548	0.0324	0.0223	-0.0005	-0.0005	-0.0017	0.013327
140.	7.	3.88	0.19	50.27	4.50	0.00	0.2756	0.0138	0.2736	0.0354	0.0226	-0.0006	-0.0006	-0.0020	0.013346
140.	8.	3.88	0.19	50.27	5.08	0.00	0.2974	0.0132	0.2951	0.0394	0.0240	-0.0001	-0.0005	-0.0015	0.013218
140.	9.	3.89	0.19	50.39	5.56	0.00	0.3168	0.0125	0.3141	0.0431	0.0250	-0.0002	-0.0006	-0.0019	0.013205
140. 140.	10. 11.	3.89 3.89	0.19 0.19	50.51 50.51	6.04 7.07	0.00	0.3342 0.3735	0.0118	0.3311 0.3692	0.0469 0.0577	0.0261 0.0326	-0.0006 -0.0018	-0.0007 -0.0005	-0.0024 0.0001	0.01311 8 0.013159
140.	12.	3.88	0.19	50.41	8.04	0.00	0.3733	0.0119 0.0200	0.4224	0.0779	0.0526	-0.0020	-0.0003	-0.0019	0.013139
140.	13.	3.88	0.19	50.42	9.04	0.00	0.4857	0.0229	0.4761	0.0799	0.0604	-0.0017	-0.0009	-0.0029	0.013213
140.	14.	3.88	0.19	50.43	10.09	0.00	0.5387	0.0249	0.5260	0.1189	0.0720	-0.0004	-0.0020	-0.0047	0.013294
140.	15.	3.86	0.18	49.98	12.08	0.00	0.6393	0.0284	0.6192	0.1615	0.0943	0.0011	-0.0043	-0.0090	0.013316
140.	16.	3.85	0.18	49.91	16.02	0.00	0.8436	0.0351	0.8012	0.2665	0.1419	0.0067	-0.0092	-0.0160	0.013267
140.	17.	3.87	0.19	50.32	20.05	0.00	1.0563	0.0426	0.9777	0.4021	0.1986	0.0095	-0.0160	-0.0263	0.013078
141.	1.	3.87	0.19	50.38	-2.05	0.00	0.0476	0.0149	0.0481	0.0132	0.0146	-0.0001	-0.0002	0.0000	0.010861
141.	2.	3.86	0.19	50.15	0.01	0.00	0.1098	0.0156	0.1098	0.0156	0.0174	-0.0005	-0.0002	-0.0003	0.010882
141.	3.	3.87	0.19	50.50	2.10	0.00	0.1813	0.0149	0.1806	0.0215	0.0205	-0.0006	-0.0002	-0.0002	0.010733
141.	4.	3.86	0.19	50.27	3.00	0.00	0.2172	0.0143	0.2161	0.0256	0.0217	-0.0006	-0.0003	-0.0003	0.010670
141.	5.	3.86	0.19	50.27	4.07	0.00	0.2559	0.0132	0.2543	0.0313	0.0228	-0.0005	-0.0003	-0.0001	0.010677
141.	6.	3.86	0.19	50.39	4.52	0.00	0.2759	0.0126	0.2740	0.0343	0.0232	-0.0005	-0.0005	-0.0011	0.010618
141.	7.	3.86	0.19	50.39	5.01	0.00	0.2936	0.0120	0.2914	0.0376	0.0243	-0.0001	-0.0005	-0.0012	0.010606
141.	8.	3.86	0.19	50.39	5.56	0.00	0.3157	0.0114	0.3131	0.0420	0.0254	-0.0002	-0.0006	-0.0013	0.010490
141.	9.	3.85	0.19	50.16	6.02	0.00	0.3336	0.0108	0.3306	0.0457	0.0266	-0.0005	-0.0006	-0.0018	0.010588
141.	10.	3.86	0.19	50.28	7.10	0.00	0.3807 0.4379	0.0132	0.3761	0.0602	0.0366	-0.0033	-0.0018	0.0073	0.010728
141. 141.	11. 12.	3.86 3.86	0.19 0.19	50.41 50.30	8.06 9.01	0.00	0.4379	0.0200 0.0221	0.4308 0.4786	0.0812 0.0982	0.0517 0.0604	-0.0017 -0.0007	-0.0007 -0.0012	-0.0011 -0.0023	0.010643 0.010716
141.	13.	3.85	0.19	50.08	10.05	0.00	0.5382	0.0221	0.5257	0.0362	0.0725	-0.0007	-0.0012	-0.0025	0.010718
141.	14.	3.84	0.18	49.86	12.06	0.00	0.6386	0.0274	0.6188	0.1602	0.0944	0.0018	-0.0042	-0.0081	0.010707
141.	15.	3.85	0.19	50.14	16.04	0.00	0.8458	0.0344	0.8034	0.2668	0.1425	0.0068	-0.0094	-0.0157	0.010497
141.	16.	3.84	0.18	49.86	20.05	0.00	1.0666	0.0428	0.9873	0.4058	0.1989	0.0097	-0.0153	-0.0243	0.010553
142.	1.	3.86	0.19	50.49	-2.04	0.00	0.0498	0.0150	0.0503	0.0132	0.0149	-0.0001	-0.0001	0.0002	0.009245
142.	2.	3.85	0.19	50.15	0.00	0.00	0.1102	0.0156	0.1102	0.0156	0.0176	-0.0005	-0.0002	0.0002	0.009141
142	3.	3.85	0.19	50.38	2.08	0.00	0.1829	0.0149	0.1823	0.0216	0.0206	-0.0006	-0.0002	0.0002	0.009133
142	4.	3.84	0.19	50.15	3.05	0.00	0.2184	0.0143	0.2174	0.0259	0.0218	-0.0007	-0.0003	-0.0001	0.009084
142	5.	3.86	0.19	50.50	4.10	0.00	0.2607	0.0131	0.2591	0.0317	0.0229	-0.0005	-0.0003	-0.0003	0.009020
142.	6.	3.84	0.19	50.15	4.56	0.00	0.2777	0.0127	0.2758	0.0348	0.0236	-0.0006	-0.0004	-0.0006	0.008943
142.	7.	3.85	0.19	50.27	5.07	0.00	0.2969	0.0120	0.2947	0.0382	0.0249	-0.0002	-0.0004	-0.0007	0.008948
142.	8.	3.85	0.19	50.27	5.54	0.00	0.3161	0.0115	0.3135	0.0420	0.0258	-0.0003	-0.0005	-0.0011	0.008911
142	9.	3.85	0.19	50.16	6.02	0.00	0.3337	0.0111	0.3307	0.0460	0.0269	-0.0007	-0.0005	-0.0008	0.008914
142.	10.	3.84	0.19	50.05	7.10	0.00	0.3837 0.4375	0.0141 0.0202	0.3790 0.4304	0.0614 0.0809	0.0379 0.0516	-0.0038 -0.0014	-0.0019 -0.0006	0.0065 -0.0007	0.009076
142. 142.	11. 12.	3.84 3.85	0.19 0.19	50.18 50.30	8.00 9.02	0.00	0.4884	0.0202	0.4304	0.0809	0.0516	-0.0014	-0.0006	-0.0007	0.008972 0.009058
142	13.	3.84	0.19	50.19	10.05	0.00	0.5383	0.0242	0.5258	0.1177	0.0725	0.0001	-0.0019	-0.0030	0.009033
142.	14.	3.83	0.18	49.98	12.01	0.00	0.6383	0.0274	0.6186	0.1597	0.0943	0.0014	-0.0041	-0.0081	0.009049
142.	15.	3.83	0.18	49.80	16.08	0.00	0.8450	0.0343	0.8024	0.2670	0.1433	0.0069	-0.0097	-0.0163	0.008840
142.	16.	3.85	0.19	50.55	20.04	0.00	1.0614	0.0424	0.9826	0.4035	0.1978	0.0090	-0.0145	-0.0236	0.008836
143.	2.	3.97	0.19	49.92	-2.00	0.00	0.0504	0.0172	0.0510	0.0154	0.0148	-0.0001	0.0000	-0.0012	0.005845
143.	3.	3.97	0.19	49.92	-0.09	0.00	0.1094	0.0175	0.1094	0.0174	0.0176	-0.0004	-0.0002	-0.0014	0.005816
143.	4.	3.96	0.19	49.92	2.03	0.00	0.1797	0.0166	0.1790	0.0230	0.0205	-0.0007	-0.0001	-0.0017	0.005786
143.	5.	3.96	0.19	49.92	3.06	0.00	0.2180	0.0155	0.2169	0.0271	0.0218	-0.0008	-0.0001	-0.0015	0.005673
143.	6.	3.95	0.18	49.81	4.04	0.00	0.2584	0.0143	0.2568	0.0325	0.0231	-0.0007	-0.0002	-0.0019	0.005712
143.	7.	3.95	0.19	49.92	4.53	0.00	0.2746	0.0137	0.2726	0.0354	0.0235	-0.0005	-0.0002	-0.0019	0.005705
143.	8.	3.96	0.19	50. 0 4	5.01	0.00	0.2938	0.0130	0.2915	0.0386	0.0253	-0.0003	-0.0003	-0.0023	0.005690
143.	9.	3.95	0.18	49.81	5.51	0.00	0.3130	0.0124	0.3103	0.0424	0.0265	-0.0004	-0.0003	-0.0019	0.005737
143.	10.	3.95	0.19	50.04	6.04	0.00	0.3367 0.3931	0.0123 0.0192	0.3335 0.3878	0.0476 0.0671	0.0275 0.0436	-0.0005 -0.0011	-0.0004 -0.0005	-0.0022 -0.0008	0.005674 0.005720
143. 143.	11. 12.	3.94 3.95	0.19 0.19	49.94 50.06	7.01 8.00	0.00	0.4350	0.0192	0.3878	0.0809	0.0526	-0.0001	-0.0007	-0.0003	0.005720
143.	13.	3.95		50.07	9.03	0.00	0.4849	0.0223	0.4754	0.0981	0.0622	-0.0003	-0.0009	-0.0025	0.005728
477.	13.	5.75	V 7	20.01	2.03										

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Run	Point	R	M	q	α	β	C _N	C _A	C_L	CD	C _m	_z q	C _n	$C_{\mathbf{Y}}$	$C_{\mathbf{q}}$
							en:				** "				
143.	14.	3.94	0.19	50.08	10.02	0.00	0.5335	0.0244	0.5211	0.1169	0.0733	0.0003	-0.0017	-0.0047	0.005682
143.	15.	3.94	0.19	49.98	12.02	0.00	0.6345	0.0275	0.6149	0.1590	0.0948	0.0015	-0.0039	-0.0096	0.005733
143.	16.	3.93	0.18	49.79	16.00	0.00	0.8431	0.0346	0.8009 0.9842	0.2657	0.1449	0.0061	-0.0083 -0.0126	-0.0149	0.005705 0.005678
143.	17.	3.93	0.18	49.97	20.02	0.00	1.0631	0.0429	0.9842	0.4043	0.1997	0.0076	-0.0126	-0.0209	0.005676
144.	1.	3.92	0.18	49.80	-2.01	0.00	0.0471	0.0151	0.0476	0.0134	0.0154	0.0000	0.0001	-0.0008	0.003167
144.	2.	3.92	0.18	49.80	-0.10	0.00	0.1040	0.0155	0.1040	0.0154	0.0181	-0.0004	-0.0001	-0.0011	0.003159
144.	3.	3.92	0.18	49.80	2.01	0.00	0.1771	0.0149	0.1764	0.0212	0.0213	-0.0005	0.0000	-0.0009	0.003179
144.	4.	3.93	0.19	50.15	3.06	0.00	0.2156	0.0140	0.2145	0.0255	0.0226	-0.0007	-0.0001	-0.0008	0.003141
144. 144.	5. 6.	3.93 3.92	0.19 0.19	50.15 50.04	3.99 4.50	0.00 0.00	0.2509 0.2734	0.0131 0.0126	0.2494 0.2716	0.0305 0.0340	0.0241	-0.0005 -0.0005	-0.0002 -0.0002	-0.0011 -0.0011	0.003103 0.003172
144.	7.	3.92	0.19	50.15	5.00	0.00	0.2910	0.0122	0.2889	0.0375	0.0264	-0.0002	-0.0002	-0.0012	0.003146
144.	8.	3.92	0.19	50.16	5.51	0.00	0.3177	0.0128	0.3150	0.0433	0.0271	-0.0001	-0.0004	-0.0009	0.003045
144.	9.	3.92	0.19	50.16	6.02	0.00	0.3484	0.0153	0.3449	0.0517	0.0312	-0.0020	-0.0008	0.0018	0.003168
144.	10.	3.91	0.19	49.94	7.00	0.00	0.3914	0.0185	0.3863	0.0661	0.0442	-0.0008	-0.0005	0.0005	0.003182
144.	11.	3.92	0.19	50.29	8.02	0.00	0.4378	0.0201	0.4307	0.0809	0.0534	-0.0007	-0.0005	-0.0008	0.003100
144.	12.	3.91	0.19	50.07	9.01	0.00	0.4853	0.0216	0.4760	0.0974	0.0629	-0.0004	-0.0010	-0.0024	0.003161
144.	13.	3.91	0.19	50.07	10.01	0.00	0.5315	0.0237	0.5193	0.1157	0.0744	0.0006	-0.0017	-0.0037	0.003147
144.	14. 15.	3.90	0.19 0.18	49.98 49.91	12.04 16.01	0.00	0.6337 0.8429	0.0269 0.0343	0.6141 0.8008	0.1585 0.2654	0.0958 0.1459	0.0015 0.0062	-0.0038 -0.0086	-0.0083 -0.0149	0.003161 0.003149
144. 144.	15. 16.	3.90 3.90	0.18	49.91 49.97	20.03	0.00	1.0637	0.0343	0.9848	0.4043	0.1439	0.0092	-0.0068	-0.0149	0.003149
144.	10.	3.50	0.10	43.71	20.03	0.00	1.0057	0.0425	0.7040	0.4043	0.2012	0.0072	-0.0140	-0.0250	0.003120
150.	1.	3.94	0.19	49.93	-2.06	0.00	0.1438	0.0340	0.1449	0.0288	-0.0095	-0.0004	-0.0003	0.0014	0.012928
150.	2.	3.92	0.18	49.58	0.03	0.00	0.2144	0.0323	0.2144	0.0324	-0.0080	-0.0006	-0.0003	0.0010	0.012917
150.	3.	3.93	0.19	50.16	2.09	0.00	0.2837	0.0294	0.2824	0.0397	-0.0036	-0.0009	-0.0002	0.0010	0.012665
150.	4.	3.92	0.19	50.28	3.08	0.00	0.3185	0.0272	0.3166	0.0443	-0.0009	-0.0008	-0.0004	0.0004	0.012625
150. 150.	5. 6.	3.92 3.92	0.19 0.19	50.39 50.39	4.04 4.51	0.00 0.00	0.3498 0.3684	0.0252 0.0241	0.3472 0.3654	0.0498 0.0530	0.0018 0.0032	-0.000 9 -0.0010	-0.0005 -0.0005	0.0002 0.0000	0.012509 0.012488
150.	7.	3.93	0.19	50.51	5.10	0.00	0.3873	0.0241	0.3837	0.0568	0.0032	-0.0010	-0.0005	0.0001	0.012443
150.	8.	3.92	0.19	50.51	5.55	0.00	0.4040	0.0211	0.4001	0.0600	0.0063	-0.0010	-0.0008	-0.0003	0.012338
150.	9.	3.90	0.19	49.82	6.04	0.00	0.4229	0.0199	0.4184	0.0643	0.0080	-0.0010	-0.0009	-0.0003	0.012359
150.	10.	3.90	0.19	50.05	7.03	0.00	0.4576	0.0176	0.4520	0.0734	0.0117	-0.0006	-0.0009	-0.0015	0.012235
150.	11.	3.91	0.19	50.29	8.06	0.00	0.5040	0.0165	0.4967	0.0870	0.0156	-0.0005	-0.0012	-0.0028	0.012094
150.	12.	3.91	0.19	50.41	9.10	0.00	0.5585	0.0174	0.5487	0.1055	0.0246	-0.0007	-0.0022	0.0030	0.012166
150.	13.	3.91	0.19	50.19	10.05	0.00	0.6137	0.0192	0.6010	0.1261	0.0324	-0.0002	-0.0020	0.0004	0.012250
150. 150.	14. 15.	3.89 3.88	0.19 0.19	49.98 49.80	12.06 16.07	0.00 0.00	0.7387 0.9683	0.0247 0.0390	0.7172 0.9196	0.1786 0.3056	0.0541 0.1178	0.0017 0.0031	-0.0035 -0.0069	-0.0077 -0.0111	0.012227 0.012461
150.	16.	3.89	0.19	50.09	19.98	0.00	1.1864	0.0502	1.0978	0.3036	0.1178	0.0074	-0.003	-0.0237	0.012159
	201	3.03							2,02.0			,			
151.	1.	3.90	0.19	50.39	-2.09	0.00	0.1431	0.0323	0.1442	0.0271	-0.0093	-0.0003	-0.0002	0.0007	0.010851
151.	2.	3.89	0.19	50.27	0.06	0.00	0.2114	0.0301	0.2113	0.0303	-0.0077	-0.0006	-0.0002	0.0002	0.010864
151.	3.	3.90	0.19	50.27	2.01	0.00	0.2762 0.3142	0.0274 0.0256	0.2751	0.0371 0.0424	-0.0035 -0.0007	-0.0008 -0.0009	-0.0002 -0.0002	0.0002 -0.0001	0.010754 0.010801
151. 151.	4. 5.	3.89 3.90	0.19 0.19	50.27 50.39	3.08 4.01	0.00 0.00	0.3142	0.0238	0.3124 0.3450	0.0424	0.0020	-0.0009	-0.0002	-0.0001	0.010667
151.	6.	3.86	0.18	49.59	4.51	0.00	0.3645	0.0227	0.3616	0.0513	0.0024	-0.0010	-0.0004	-0.0006	0.010666
151.	7.	3.88	0.19	49.93	5.09	0.00	0.3852	0.0210	0.3818	0.0551	0.0053	-0.0010	-0.0006	-0.0009	0.010651
151.	8.	3.88	0.19	50.16	5.50	0.00	0.3991	0.0199	0.3954	0.0581	0.0066	-0.0010	-0.0006	-0.0009	0.010530
151.	9.	3.88	0.19	50.28	6.06	0.00	0.4187	0.0184	0.4144	0.0625	0.0083	-0.0009	-0.0008	-0.0014	0.010506
151.	10.	3.88	0.19	50.28	7.01	0.00	0.4541	0.0168	0.4487	0.0721	0.0123	-0.0009	-0.0009	-0.0022	0.010475
151.	11.	3.88	0.19	50.29	8.02	0.00	0.5001	0.0159	0.4930	0.0855	0.0180	-0.0011	-0.0014	-0.0017	0.010437
151.	12.	3.87	0.19	49.95	9.05	0.00	0.5616	0.0181	0.5518	0.1062	0.0263	-0.0003	-0.0017	0.0006 -0.0049	0.010591 0.010520
151. 151.	13. 14.	3.87 3.88	0.19 0.19	49.84 50.32	10.03 12.00	0.00 0.00	0.6226 0.7417	0.0219 0.0286	0.6092 0.7196	0.1300 0.1823	0.0376 0.0622	-0,0003 0.0000	-0.0018 -0.0022	-0.0007	0.010712
151.	15.	3.87	0.19	50.14	16.07	0.00	0.9707	0.0398	0.9217	0.3069	0.1198	0.0036	-0.0065	-0.0119	0.010642
151.	16.	3.87	0.19	50.09	20.06	0.00	1.1875	0.0498	1.0984	0.4541	0.1789	0.0086	-0.0151	-0.0257	0.010506
152.	2.	3.92	0.19	50.28	-6.03	0.00	-0.0013	0.0321	0.0021	0.0321	-0.0158	-0.0008	0.0000	0.0015	0.009173
152.	3.	3.90	0.19	49.93	-4.06 2.06	0.00	0.0734	0.0331	0.0756	0.0278	-0.0121	-0.0005	-0.0001 -0.0002	0.0006 0.0003	0.009221 0.009095
152. 152.	4. 5.	3.94 3.91	0.19 0.19	51.08 50.16	-2.06 -0.03	0.00 0.00	0.1449 0.2083	0.0323 0.0303	0.1460 0.2083	0.0270 0.0302	-0.0094 -0.0080	-0.0005 -0.0006	-0.0002	-0.0001	0.009093
152.	6.	3.91	0.19	50.16	-0.03	0.00	0.2091	0.0303	0.2091	0.0301	-0.0080	-0.0007	-0.0003	-0.0003	0.009141
152.	7.	3.90	0.19	50.27	2.01	0.00	0.2765	0.0273	0.2754	0.0370	-0.0037	-0.0009	-0.0001	0.0000	0.009094
152.	8.	3.89	0.19	50.04	3.04	0.00	0.3130	0.0254	0.3112	0.0420	-0.0009	-0.0009	-0.0002	-0.0003	0.009043
152.	9.	3.91	0.19	50.62	4.08	0.00	0.3476	0.0233	0.3451	0.0480	0.0021	-0.0010	-0.0003	-0.0006	0.008917
152.	10.	3.91	0.19	50.51	4.53	0.00	0.3656	0.0223	0.3627	0.0511	0.0035	-0.0011	-0.0005	-0.0011	0.008911

Run	Point	R	М	q	α	β	C _N	C _A	$c_{\mathtt{L}}$	$c_{\mathtt{D}}$	C _m	c i	C _n	C _Y	$C_{\mathbf{q}}$
152.	11.	3.90	0.19	50.28	5.00	0.00	0.3822	0.0210	0.3789	0.0542	0.0049	-0.0010	-0.0005	-0.0012	0.008835
152.	12.	3.89	0.19	50.16	5.52	0.00	0.4012	0.0199	0.3975	0.0584	0.0066	-0.0010	-0.0006	-0.0011	0.008784
152.	13.	3.88	0.19	49.82	6.10	0.00	0.4215	0.0184	0.4172	0.0631	0.0083	-0.0010	-0.0008	-0.0016	0.008846
152.	14.	3.88	0.19	49.94	7.04	0.00	0.4548	0.0173	0.4493	0.0729	0.0127	-0.0011	-0.0009	-0.0021	0.008798
152.	15.	3.89	0.19	50.17	8.09	0.00	0.5139	0.0184	0.5062	0.0905	0.0215	-0.0008	-0.0015	0.0000	0.008846
152.	16.	3.88	0.19	50.07	9.08	0.00	0.5753	0.0219	0.5647	0.1125	0.0307	-0.0006	-0.0013	-0.0040	0.008715
152	17.	3.89	0.19	50.19	10.01	0.00	0.6290	0.0235	0.6154	0.1325	0.0386	0.0000	-0.0019	-0.0035	0.008759
152	18.	3.88	0.19	49.98	12.08	0,00	0.7495	0.0296	0.7267	0.1858	0.0651	0.0000	-0.0027	-0.0024	0.008944
152.	19.	3.87	0.19	49.91	16.05	0.00	0.9701	0.0397	0.9213	0.3063	0.1195	0.0028	-0.0060	-0.0116 -0.0232	0.008875 0.008843
152.	20.	3.87	0.19	49.97	20.01	0.00	1.1898	0.0498	1.1009	0.4540	0.1778	0.0073	-0.0133		
153.	1.	3.86	0.19	50.16	-6.09	0.00	-0.0072	0.0302	-0.0040	0.0308	-0.0159	-0.0008	0.0000	0.0005	0.006173
153.	2.	3.85	0.19	49.93	-4.08	0.00	0.0713	0.0311	0.0733	0.0260 0.0257	-0.0119 -0.0094	-0.0004 -0.0004	-0.0001 -0.0002	0.0004 -0.0003	0.006188 0.006187
153.	3.	3.86	0.19	50.27 50.38	-2.01	0.00	0.1420 0.2089	0.0307 0.0288	0.1430 0.2089	0.0257	-0.0078	-0.0004	-0.0002	-0.0003	0.006166
153. 153.	4. 5.	3.87	0.19 0.19	50.38 50.15	0.08 2.09	0.00 0.00	0.2768	0.0262	0.2757	0.0363	-0.0074	-0.0008	-0.0001	-0.0001	0.006145
153.	5. 6.	3.86 3.86	0.19	50.27	3.09	0.00	0.3131	0.0245	0.3113	0.0414	-0.0006	-0.0009	-0.0003	-0.0004	0.006077
153.	7.	3.87	0.19	50.50	4.10	0.00	0.3479	0.0227	0.3454	0.0475	0.0023	-0.0009	-0.0004	-0.0007	0.006033
153.	8.	3.87	0.19	50.62	4.54	0.00	0.3619	0.0218	0.3591	0.0503	0.0038	-0.0010	-0.0005	-0.0007	0.006022
153.	9.	3.87	0.19	50.62	5.06	0.00	0.3835	0.0208	0.3801	0.0546	0.0054	-0.0011	-0.0005	-0.0007	0.005921
153.	10.	3.86	0.19	50.39	5.50	0.00	0.3981	0.0201	0.3943	0.0582	0.0071	-0.0010	-0.0006	-0.0005	0.005984
153.	11.	3.86	0.19	50.39	6.05	0.00	0.4212	0.0196	0.4168	0.0639	0.0098	-0.0008	-0.0008	-0.0006	0.005964
153.	12.	3.86	0.19	50.40	7.03	0.00	0.4718	0.0207	0.4657	0.0784	0.0179	-0.0010	-0.0009	-0.0008	0.005948
153.	13.	3.86	0.19	50.41	8.01	0.00	0.5272	0.0234	0.5188	0.0966	0.0264	-0.0005	-0.0011	-0.0032	0.005933
153.	14.	3.85	0.19	50.07	9.00	0.00	0.5855	0.0266	0.5742	0.1179	0.0371	-0.0004	-0.0010	0.0017	0.006075
153.	15.	3.84	0.19	49.96	10.08	0.00	0.6505	0.0303	0.6351	0.1437	0.0504	-0.0006	-0.0018	-0.0023	0.006064
153.	16.	3.86	0.19	50.56	12.09	0.00	0.7537	0.0326	0.7301	0.1897	0.0707	0.0004	-0.0032	-0.0058	0.006023 0.005977
153.	17.	3.84	0.19	50.03	16.08	0.00	0.9701	0.0403	0.9210	0.3074	0.1203	0.0036 0.0082	-0.0073 -0.0145	-0.0134 -0.0240	0.005918
153.	18.	3.84	0.19	50.09	20.02	0.00	1.1863	0.0502	1.0974	0.4534	0.1784				
154.	1.	3.85	0.19	50.39	-6.09	0.00	-0.0065	0.0303	-0.0032	0.0308	-0.0161	-0.0007	0.0000	0.0008	0.003212
154.	2.	3.85	0.19	50.39	-4.03	0.00	0.0719_	0.0313	0.0739	0.0261	-0.0119	-0.0003	-0.0001	0.0003	0.003144
154.	3.	3.84	0.19	50.15	-2.05	0.00	0.1419	0.0308	0.1429	0.0257	-0.0093	-0.0003	-0.0001	-0.0001	0.003196
154.	4.	3.84	0.19	50.04	0.03	0.00	0.2064	0.0291	0.2064	0.0292	-0.0080	-0.0005	-0.0002 -0.0002	-0.0004 -0.0001	0.003196 0.003141
154.	5.	3.83	0.19	49.92	2.08	0.00	0.2769	0.0264 0.0250	0.2757 0.3107	0.0364 0.0416	-0.0033 -0.0005	-0.0008 -0.0009	-0.0002	-0.0001	0.003141
154.	6.	3.83	0.19	49.93 50.39	3.05 4.08	0.00	0.3124 0.3492	0.0230	0.3467	0.0410	0.0026	-0.0010	-0.0003	-0.0004	0.003101
154. 154.	7. 8.	3.85 3.85	0.19 0.19	50.39	4.51	0.00	0.3655	0.0232	0.3625	0.0515	0.0042	-0.0010	-0.0004	-0.0005	0.003121
154.	9.	3.85	0.19	50.39	5.05	0.00	0.3875	0.0225	0.3840	0.0566	0.0066	-0.0009	-0.0004	-0.0009	0.003103
154.	10.	3.84	0.19	50.28	5.51	0.00	0.4070	0.0222	0.4030	0.0612	0.0101	-0.0009	-0.0005	-0.0011	0.003087
154.	11.	3.84	0.19	50.16	6.02	0.00	0.4347	0.0237	0.4298	0.0691	0.0153	-0.0012	-0.0006	-0.0017	0.003104
154.	12.	3.83	0.19	49.83	7.07	0.00	0.4965	0.0269	0.4894	0.0878	0.0251	-0.0004	-0.0006	0.0006	0.003189
154.	13.	3.83	0.19	50.06	8.03	0.00	0.5451	0.0286	0.5358	0.1044	0.0337	-0.0005	-0.0012	-0.0017	0.003131
154.	14.	3.83	0.19	50.07	9.03	0.00	0.5964	0.0296	0.5844	0.1228	0.0420	-0.0004	-0.0015	-0.0026	0.003086
154.	15.	3.84	0.19	50.08	10.01	0.00	0.6470	0.0304	0.6319	0.1424	0.0499	-0.0004	-0.0017	-0.0023	0.003146
154.	16.	3.85	0.19	50.44	12.02	0.00	0.7505	0.0328	0.7272	0.1883	0.0689	0.0005	-0.0031	-0.0052	0.003108
154.	17.	3.84	0.19	50.26	16.09	0.00	0.9702	0.0405	0.9209	0.3078	0.1198	0.0031	-0.0062	-0.0115	0.003057
154.	18.	3.84	0.19	50.09	20.01	0.00	1.1860	0.0503	1.0972	0.4532	0.1772	0.0080	-0.0141	-0.0234	0.003036
157.	2.	3.90	0.19	50.05	-6.03	0.00	0.0009	0.0324	0.0043	0.0322	-0.0165	-0.0007	0.0001	0.0019	0.000000
157.	3.	3.89	0.19	50.04	-4.02	0.00	0.0759	0.0330	0.0781	0.0276	-0.0119	-0.0004	-0.0001	0.0014	0.000000
157.	4.	3.88	0.19	49.92	-2.07	0.00	0.1440	0.0323	0.1450	0.0271	-0.0093	-0.0005	-0.0001	0.0009	0.000000
157.	5.	3.88	0.19	49.92	0.03	0.00	0.2108	0.0305	0.2108	0.0306	-0.0078	-0.0007	-0.0001	0.0004	0.000000
157.	6.	3.87	0.19	49.81	2.01	0.00	0.2783	0.0278	0.2771	0.0376	-0.0035	-0.0008	0.0000	0.0008	0.000000
157.	7.	3.87	0.19	49.93	3.03	0.00	0.3148	0.0262	0.3129	0.0427	-0.0006 0.0026	-0.000 8 -0.0011	-0.0001 -0.0003	0.0003	0.000000
157.	8.	3.88	0.19	50.16	4.03	0.00	0.3510	0.0245	0.3484 0.3650	0.0491 0.0527	0.0026	-0.0011	-0.0003	0.0003	0.000000
157.	9. 10	3.89	0.19	50.39	4.50 5.00	0.00 0.00	0.3680 0.3926	0.0239 0.0234	0.3890	0.0581	0.0083	-0.0010	-0.0001	0.0002	0.000000
157.	10.	3.89	0.19	50.51 50.39	5.09 5.51	0.00	0.3926	0.0234	0.4069	0.0632	0.0118	-0.0011	-0.0003	-0.0001	0.000000
157. 157.	11. 12.	3.89 3.88	0.19	50.39 50.28	6.02	0.00	0.4111	0.0246	0.4331	0.0704	0.0159	-0.0009	-0.0005	-0.0009	0.000000
157.	13.	3.87	0.19	50.17	7.06	0.00	0.4914	0.0258	0.4845	0.0860	0.0230	-0.0007	-0.0007	-0.0016	0.000000
157.	14.	3.88	0.19	50.41	8.03	0.00	0.5416	0.0267	0.5326	0.1020	0.0306	-0.0005	-0.0009	-0.0021	0.000000
157.	15.	3.86	0.19	49.95	9.01	0.00	0.5975	0.0286	0.5857	0.1218	0.0388	-0.0004	-0.0011	-0.0015	0.000000
157.	16.	3.86	0.19	49.85	10.01	0.00	0.6480	0.0300	0.6329	0.1422	0.0479	-0.0004	-0.0017	-0.0027	0.000000
157.	17.	3.87	0.19	50.21	12.06	0.00	0.7583	0.0330	0.7346	0.1908	0.0691	0.0007	-0.0030	-0.0050	0.000000

Run	Point	R	М		α	R	C.,	C _A	c_L	$c_{\scriptscriptstyle m D}$	C	G	C _n	$c_{\mathtt{Y}}$	C _q
Ruii	POLIA	K	M	q	•	. β . }÷	C _N	℃ A	℃L	CD	C ^{EE}	Ч	—	СY	Çq
157.	18.	3.87	0.19	50,37	16.03	0.00	0.9661	0.0401	0.9174	0.3054	0.1183	0.0026	-0.0056	-0.0105	0.000000
157.	19.	3.86	0.19	50.09	19.92	0.00	1.1786	0.0491	1.0914	0.4476	0.1739	0.0095	-0.0152	-0.0259	0.000000
157.	20.	3.85	0.19	49.74	20.02	0.00	1.1904	0.0497	1.1014	0.4542	0.1754	0.0082	-0.0136	-0.0231	0.000000
160.	2.	3.91	0.19	50.50	-6.07	0.02	0.0285	0.0251	0.0310	0.0219	-0.0269	-0.0005	-0.0001	0.0034	0.000000
160.	3.	3.88	0.19	50.04	-4.04	0.02	0.0975	0.0275	0.0992	0.0205	-0.0195	-0.0002	-0.0001	0.0017	0.000000
160.	4.	3.87	0.19	49.92	-2.08	0.02	0.1594	0.0289	0.1603	0.0231	-0.0144	-0.0004	-0.0001	0.0015	0.000000
160. 160.	5. 6.	3.86 3.86	0.19 0.19	49.69 49.69	-0.04 2.00	0.02 0.02	0.2244 0.2974	0.0293 0.0285	0.2244 0.2962	0.0292 0.0388	-0.0126 _. -0.0106	-0.0005 -0.0009	-0.0002 -0.0002	0.0020 0.0033	0.000000
160.	7.	3.86	0.19	49.93	3.01	0.02	0.3382	0.0235	0.3362	0.0454	-0.0099	-0.0009	-0.0002	0.0042	0.000000
160.	8.	3.87	0.19	50.16	4.04	0.02	0.3791	0.0269	0.3763	0.0535	-0.0084	-0.0006	-0.0003	0.0043	0.000000
160.	9.	3.87	0.19	50.28	4.50	0.02	0.3994	0.0267	0.3961	0.0580	-0.0073	-0.0006	-0.0003	0.0039	0.000000
160.	10.	3.87	0.19	50.16	5.02	0.02	0.4243	0.0270	0.4204	0.0641	-0.0059	-0.0002	-0.0003	0.0035	0.000000
160. 160.	11. 12.	3.87 3.85	0.19 0.19	50.28 49.82	5.50 6.01	0.02 0.02	0.4500 0.4758	0.0278 0.0298	0.4452 0.4701	0.0708 0.0794	-0.0052 0.0005	-0.0003 0.0004	-0.0002 -0.0004	0.0031 0.0004	0.000000
160.	13.	3.86	0.19	50.17	7.10	0.02	0.5262	0.0236	0.5183	0.0968	0.0103	-0.0004	-0.0004	-0.0026	0.000000
160.	14.	3.85	0.19	49.95	8.05	0.02	0.5787	0.0344	0.5682	0.1151	0.0195	-0.0007	-0.0008	-0.0038	0.000000
160.	15.	3.85	0.19	49.84	9.05	0.02	0.6346	0.0375	0.6208	0.1369	0.0287	-0.0005	-0.0010	-0.0043	0.000000
160.	16.	3.85	0.19	49.85	10.01	0.02	0.6831	0.0396	0.6658	0.1577	0.0370	-0.0005	-0.0016	-0.0054	0.000000
160.	17.	3.85	0.19	49.99	12.12	0.02	0.7984	0.0441	0.7714	0.2107	0.0555	0.0006	-0.0030	-0.0074	0.000000
160. 160.	18. 19.	3.85 3.84	0.19 0.19	50.03 49.98	16.06 20.06	0.02 0.02	1.0100 1.2260	0.0529 0.0610	0.9560 1.1307	0.3303 0.4777	0.1038 0.1604	0.0051 0.0122	-0.0077 -0.0181	-0.0150 -0.0300	0.000000
100.	17.	3.04	0.13	47.70	20.00	0.02	1.2200	0.0010	1.1507	0.4///	0.1004	0.0122	-0.0101	-0.0300	
161.	1.	3.84	0.19	50.04	-6.09	5.00	0.0223	0.0227	0.0246	0.0202	-0.0310	0.0011	-0.0045	-0.0095	0.000000
161.	2.	3.83	0.19	49.92	-4.04	5.00	0.0890	0.0250	0.0906	0.0187	-0.0235	-0.0011	-0.0042	-0.0061	0.000000
161.	3.	3.84	0.19	50.15	-2.01	5.00	0.1552	0.0265	0.1561	0.0210	-0.0184	-0.0033	-0.0044	-0.0091	0.000000
161.	4.	3.83	0.19	50.04 49.92	0.02 2.02	5.00 5.00	0.2254 0.3005	0.0269 0.0266	0.2254 0.2994	0.0270 0.0372	-0.0154 -0.0138	-0.0041 -0.0049	-0.0046 -0.0037	-0.0113 -0.0104	0.000000
161. 161.	5. 6.	3.83 3.82	0.19 0.19	49.92	3.03	5.00	0.3450	0.0205	0.2994	0.0372	-0.0138	-0.0049	-0.0037	-0.0104	0.000000
161.	7.	3.83	0.19	50.04	4.06	5.00	0.3892	0.0282	0.3862	0.0556	-0.0067	-0.0081	-0.0055	-0.0046	0.000000
161.	8.	3.82	0.19	49.93	4.57	5.00	0.4101	0.0285	0.4065	0.0611	-0.0034	-0.0086	-0.0057	-0.0030	0.000000
161.	9.	3.83	0.19	50.16	5.09	5.00	0.4304	0.0288	0.4261	0.0668	-0.0001	-0.0094	-0.0058	-0.0006	0.000000
161.	10.	3.84	0.19	50.28	5.51	5.00	0.4475	0.0289	0.4426	0.0718	0.0017	-0.0099	-0.0059	0.0003	0.000000
161. 161.	11. 12.	3.82 3.82	0.19 0.19	49.94 49.83	6.08 7.01	5.00 5.00	0.4739 0.5191	0.0293 0.0304	0.4682 0.5115	0.0793 0.0935	0.0044	-0.0106 -0.0119	-0.0061 -0.0061	0.0009 0.0014	0.000000
161.	13.	3.82	0.19	49.95	8.00	5.00	0.5721	0.0327	0.5620	0.0333	0.0168	-0.0119	-0.0054	-0.0009	0.000000
161.	14.	3.82	0.19	49.84	9.08	5.00	0.6268	0.0355	0.6133	0.1340	0.0277	-0.0141	-0.0052	-0.0040	0.000000
161.	15.	3.81	0.19	49.85	10.05	5.00	0.6762	0.0371	0.6594	0.1546	0.0355	-0.0148	-0.0055	-0.0052	0.000000
161.	16.	3.81	0.19	49.64	12.03	5.00	0.7869	0.0412	0.7610	0.2044	0.0526	-0.0164	-0.0071	-0.0097	0.000000
161.	17. 18.	3.81 3.82	0.19 0.19	49.92 49.98	16.06 20.02	5.00 5.00	1.0128 1.2275	0.0509	0.9592	0.3290	0.0966 0.1538	-0.0189	-0.0151 -0.0236	-0.0225 -0.0325	0.000000
161.	10.	3.62	0.19	47.76	20.02	3.00	1.22/3	0.0600	1.1328	0.4766	0.1556	-0.0188	-0.0236	-0.0323	4.00000
162.	1.	3.81	0.19	49.92	-6.04	-5.03	0.0249	0.0233	0.0272	0.0205	-0.0317	0.0002	0.0045	0.0062	0.000000
162.	2.	3.81	0.19	50.15	-4.00	-5.04	0.0908	0.0255	0.0923	0.0191	-0.0230	0.0017	0.0041	0.0041	0.000000
162. 162.	3. 4.	3.81 3.82	0.19 0.19	50.04 50.27	-2.06 0.03	-5.04 -5.04	0.1526 0.2227	0.0273 0.0276	0.1535	0.0218 0.0277	-0.0178 -0.0153	0.0035 0.0048	0.0043 0.0044	0.0045 0.0050	0.000000
162.	5.	3.82	0.19	50.38	2.08	-5.04	0.2982	0.0270	0.2971	0.0379	-0.0133	0.0059	0.0037	0.0038	0.000000
162.	6.	3.80	0.19	49.93	3.02	-5.04	0.3374	0.0273	0.3355	0.0451	-0.0119	0.0064	0.0044	0.0021	0.000000
162.	7.	3.81	0.19	50.16	4.04	-5.04	0.3801	0.0282	0.3772	0.0549	-0.0064	0.0085	0.0052	-0.0022	0.000000
162	8.	3.81	0.19	50.16	4.51	-5.04	0.4027	0.0290	0.3992	0.0606	-0.0032	0.0087	0.0052	-0.0049	0.000000
162.	9. 10	3.80	0.19	49.93	5.04	-5.04	0.4237	0.0294	0.4195	0.0665	0.0001 0.0032	0.0096	0.0054 0.0055	-0.0068 -0.0083	0.000000
162. 162.	10. 11.	3.80 3.80	0.19 0.19	50.05 50.05	5.54 6.04	-5.04 -5.04	0.4460 0.4680	0.0295 0.0299	0.4411 0.4622	0.0724	0.0051	0.0103 0.0107	0.0054	-0.0094	0.000000
162.	12.	3.80	0.19	50.06	7.07	-5.04	0.5175	0.0310	0.5097	0.0944	0.0104	0.0130	0.0053	-0.0104	0.000000
162.	13.	3.81	0.19	50.29	8.08	-5.04	0.5666	0.0327	0.5564	0.1120	0.0176	0.0136	0.0048	-0.0094	0.000000
162.	14.	3.80	0.19	50.07	9.09	-5.04	0.6229	0.0349	0.6096	0.1329	0.0240	0.0155	0.0044	-0.0077	0.000000
162.	15.	3.81	0.19	50.20	10.07	-5.04	0.6697	0.0368	0.6529	0.1533	0.0337	0.0148	0.0047	-0.0061	0.000000
162. 162.	16. 17.	3.80 3.79	0.19 0.19	49.98 49.80	12.09 16.03	-5.04 -5.04	0.7819 1.0076	0.0415 0.0526	0.7559 0.9539	0.2043	0.0518	0.016 8 0.0271	0.0047 0.0015	-0.0039 -0.0142	0.000000
162.	18.	3.79	0.19	49.75	20.11	-5.04 -5.04	1.1722	0.0620	1.0795	0.4612	0.1700	0.0271	-0.0013	-0.0142	0.000000
						·					2,2,00				
164.	2.	3.82	0.19	50.04	-2.02	-0.08	0.1630	0.0297	0.1639	0.0239	-0.0146	-0.0003	-0.0002	0.0003	0.012732
164.	3.	3.81	0.19	50.04	0.09	-0.08	0.2293	0.0297	0.2293	0.0300	-0.0130	-0.0005	-0.0002	0.0003	0.012679
164. 164	4. 5.	3.80	0.19 0.19	50.04 50.05	1.97	-0.08 -0.08	0.2974	0.0290	0.2963	0.0393	-0.0110	-0.0008	-0.0001	0.0003 -0.0005	0.012559 0.012490
164.	J.	3.80	0.17	20.00	3.00	-v.vo	0.3405	0.0280	0.3385	0.0458	-0.0102	-0.0007	-0.0001	~.0003	U.U 1 247U

Run	Point	R	M	q	α	β	C _N	C _A	C_L	c_{D}	C _m	G	C _R	С _¥	Cq
164.	6.	3.80	0.19	50.28	4.04	-0.08	0.3846	0.0267	0.3818	0.0537	-0.0092	-0.0002	-0.0001	-0.0010	0.012386
164.	7.	3.80	0.19	50.28	4.48	-0.08	0.4042	0.0259	0.4009	0.0574	-0.0087	-0.0002	-0.0002	-0.0013	0.012218
164.	8.	3.79	0.19	50.16	4.99	-0.08	0.4235	0.0252	0.4197	0.0619	-0.0080	-0.0005	-0.0001	-0.0017	0.012303
164.	9.	3.80	0.19	50.28	5.51	-0.08	0.4331	0.0247	0.4288	0.0662	-0.0060	-0.0009	-0.0003	-0.0018	0.012182
164.	10.	3.79	0.19	50.17	5.97	-0.08	0.4513	0.0239	0.4463	0.0707	-0.0044	-0.0005	-0.0004	-0.0021	0.012255
164.	11.	3.79	0.19	50.29	7.06	-0.08	0.4936	0.0228	0.4870	0.0833	-0.0011	-0.0002	-0.0006	-0.0034	0.012088
164.	12.	3.79	0.19	50.18 49.95	8.02	-0.08	0.5437 0.6073	0.0233	0.5352	0.0989	0.0005	-0.0012	-0.0007	-0.0047	0.012060
164. 164.	13.	3.78 3.78	0.19 0.19	49.95	8.98 10.08	-0.08 -0.08	0.6637	0.0267 0.0300	0.5957 0.6482	0.1211	0.0043	-0.0011	-0.0018	0.0018	0.012231
164. 164.	14. 15.	3.78	0.19	49.98	12.01	-0.08	0.0037	0.0300	0.7527	0.1457 0.1981	0.0141 0.0367	-0.0020 0.0018	-0.0017 -0.0035	0.0000 -0.0087	0.012111 0.012067
164.	16.	3.77	0.19	49.69	16.00	-0.08	1.0024	0.0525	0.7327	0.1361	0.1004	0.0018	-0.0064	-0.0091	0.012397
164.	17.	3.78	0.19	50.10	20.02	-0.08	1.2244	0.0636	1.1286	0.4790	0.1607	0.0075	-0.0124	-0.0194	0.012111
•••	•••	••		3-6-						,0000		0.007.5		0.0151	
165.	2.	3.79	0.19	49.81	-2.03	-0.08	0.1628	0.0289	0.1637	0.0231	-0.0144	-0.0003	0.0000	0.0003	0.000000
165.	3.	3.78	0.19	49.81	-0.01	-0.08	0.2257	0.0290	0.2258	0.0290	-0.0129	-0.0005	0.0000	-0.0003	0.000000
165.	4.	3.78	0.19	49.81	2.04	-0.08	0.3011	0.0287	0.2999	0.0394	-0.0107	-0.0008	0.0001	0.0002	0.000000
165.	5.	3.78	0.19	49.93	3.01	-0.08	0.3418	0.0281	0.3398	0.0460	-0.0102	-0.0008	0.0001	-0.0007	0.000000
165.	6.	3.79	0.19	50.27	4.06	-0.08	0.3849 0.4054	0.0280	0.3820	0.0552	-0.0078	-0.0005	-0.0001	-0.0007	0.000000
165. 165.	7. 8.	3.78 3.78	0.19 0.19	50.16 50.16	4.50 5.06	-0.08 -0.08	0.4346	0.0283 0.0294	0.4019 0.4303	0.0600 0.0677	-0.0066 -0.0042	-0.0002 -0.0004	0.0000 -0.0001	-0.0015 -0.0017	0.000000
165.	9.	3.77	0.19	49.94	5.50	-0.08	0.4544	0.0306	0.4494	0.0740	0.0005	-0.0004	-0.0002	-0.0017	0.000000
165.	10.	3.77	0.19	49.94	6.00	-0.08	0.4802	0.0323	0.4742	0.0823	0.0047	-0.0007	-0.0002	-0.0006	0.000000
165.	11.	3.76	0.19	49.72	7.00	-0.08	0.5278	0.0348	0.5196	0.0988	0.0147	-0.0010	-0.0005	-0.0011	0.000000
165.	12.	3.77	0.19	49.95	8.05	-0.08	0.5792	0.0368	0.5683	0.1176	0.0230	-0.0009	-0.0007	-0.0020	0.000000
165.	13.	3.76	0.19	49.73	9.01	-0.08	0.6276	0.0386	0.6138	0.1364	0.0308	-0.0010	-0.0010	-0.0023	0.000000
165.	14.	3.75	0.19	49.62	10.00	-0.08	0.6823	0.0410	0.6648	0.1588	0.0387	-0.0008	-0.0014	-0.0033	0.000000
165.	15.	3.77	0.19	50.10	12.05	-0.08	0.7921	0.0451	0.7652	0.2095	0.0570	0.0005	-0.0031	-0.0066	0.000000
165.	16.	3.76	0.19	50.04	16.08	-0.08	1.0048	0.0543	0.9504	0.3305	0.1060	0.0046	-0.0070	-0.0126	0.000000
165.	17.	3.75	0.19	49.87	20.00	-0.08	1.2259	0.0646	1.1299	0.4800	0.1626	0.0079	-0.0128	-0.0204	0.000000
166.	1.	3.74	0.19	49.92	-2.08	-0.08	0.1578	0.0275	0.1587	0.0217	-0.0148	-0.0003	-0.0001	-0.0005	0.010971
166.	. 2.	3.74	0.19	49.81	-0.01	-0.08	0.2224	0.0278	0.2224	0.0277	-0.0130	-0.0007	-0.0003	-0.0010	0.010922
166.	3.	3.74	0.19	49.81	2.02	-0.08	0.2977	0.0273	0.2965	0.0377	-0.0110	-0.0007	-0.0001	-0.0007	0.010866
166.	4.	3.73	0.19	49.81	3.02	-0.08	0.3367 0.3794	0.0266	0.33 48 0.37 <i>6</i> 7	0.0443	-0.0105	-0.0007	-0.0001	-0.0013	0.010804
166. 166.	5. 6.	3.73 3.74	0.19 0.19	49.82 49.93	4.07 4.55	-0.08 -0.08	0.3794	0.0256 0.0251	0.3767	0.0525 0.0566	-0.0093 -0.0085	-0.0004 -0.0005	-0.0002 -0.0002	-0.0018 -0.0020	0.010 799 0.010 67 3
166.	7.	3.73	0.19	49.82	5.01	-0.08	0.4152	0.0231	0.4115	0.0608	-0.0076	-0.0007	-0.0002	-0.0022	0.010655
166.	8.	3.73	0.19	49.93	5.51	-0.08	0.4320	0.0240	0.4277	0.0654	-0.0059	-0.0009	-0.0003	-0.0024	0.010570
166.	9.	3.73	0.19	49.94	6.00	-0.08	0.4519	0.0234	0.4470	0.0705	-0.0042	-0.0006	-0.0004	-0.0028	0.010545
166.	10.	3.73	0.19	49.94	7.00	-0.08	0.4904	0.0226	0.4840	0.0822	-0.0010	-0.0003	-0.0007	-0.0036	0.010454
166.	11.	3.73	0.19	49.95	8.03	-0.08	0.5605	0.0244	0.5516	0.1024	-0.0045	0.0005	-0.0010	-0.0034	0.010480
166.	12.	3.74	0.19	50.19	9.06	-0.08	0.6167	0.0288	0.6045	0.1255	0.0074	-0.0025	-0.0012	0.0000	0.010526
166.	13.	3.73	0.19	50.08	10.03	-0.08	0.6608	0.0327	0.6450	0.1473	0.0233	-0.0002	-0.0016	-0.0056	0.010445
166.	14.	3.73	0.19	49.99	12.06	-0.08	0.7864	0.0415	0.7604	0.2049	0.0480	-0.0010	-0.0020	-0.0025	0.010705
166.	15.	3.73	0.19	50.04	16.01	-0.08	1.0026	0.0530	0.9491	0.3275	0.1014	0.0047	-0.0071	-0.0116	0.010603
166.	16.	3.73	0.19	50.10	20.01	-0.08	1.2222	0.0642	1.1265	0.4785	0.1620	0.0087	-0.0145	-0.0225	0.010500
167.	1.	3.72	0.19	50.04	-2.04	-0.08	0.1597	0.0272	0.1605	0.0215	-0.0147	-0.0004	-0.0002	-0.0016	0.009028
167.	2.	3.71	0.19	49.92	0.02	-0.08	0.2257	0.0277	0.2257	0.0278	-0.0130	-0.0006	-0.0002	-0.0015	0.009024
167.	3.	3.71	0.19	49.93	2.05	-0.08	0.2996	0.0273	0.2984	0.0380	-0.0109	-0.0008	-0.0001	-0.0016	0.008997
167.	4.	3.71	0.19	49.93	3.06	-0.08	0.3404	0.0266	0.3385	0.0448	-0.0105	-0.0008	-0.0001	-0.0019	0.008924
167.	5.	3.71	0.19	49.93	4.07	-0.08	0.3805	0.0258	0.3777	0.0527	-0.0092	-0.0005	-0.0001	-0.0021	0.008830
167.	6.	3.71	0.19	49.82	4.51	-0.08	0.3971	0.0252	0.3939	0.0564	-0.0085	-0.0005	-0.0002	-0.0026	0.008862
167. 167.	7. 8.	3.71 3.71	0.19 0.19	50.05 50.05	5.03 5.51	-0.08 -0.08	0.4173 0.4346	0.0246 0.0240	0.4136 0.4303	0.0612 0.0657	-0.0074 -0.0058	-0.0007 -0.0010	-0.0002 -0.0004	-0.0026 -0.0029	0.008756 0.008749
167.	9.	3.71	0.19	49.82	6.07	-0.08	0.4559	0.0240	0.4509	0.0037	-0.0039	-0.0006	-0.0004	-0.0023	0.008749
167.	10.	3.72	0.19	50.17	7.00	-0.08	0.4998	0.0235	0.4932	0.0843	-0.0020	-0.0007	-0.0007	-0.0034	0.008598
167.	11.	3.72	0.19	50.18	8.04	-0.08	0.5696	0.0279	0.5601	0.1073	0.0013	-0.0026	-0.0010	-0.0013	0.008655
167.	12.	3.70	0.19	49.73	9.04	-0.08	0.6169	0.0319	0.6042	0.1284	0.0156	-0.0009	-0.0010	-0.0050	0.008680
167.	13.	3.71	0.19	49.85	10.05	-0.06	0.6768	0.0373	0.6599	0.1549	0.0316	-0.0014	-0.0006	-0.0002	0.008882
167.	14.	3.70	0.19	49.87	12.02	-0.08	0.7870	0.0426	0.7609	0.2055	0.0498	-0.0006	-0.0023	-0.0036	0.008786
167.	15.	3.71	0.19	49.92	16.01	-0.08	1.0037	0.0542	0.9499	0.3289	0.1045	0.0049	-0.0072	-0.0133	0.008745
167.	16.	3.72	0.19	50.33	20.00	-0.08	1.2255	0.0648	1.1294	0.4800	0.1607	0.0062	-0.0112	-0.0189	0.008539
168.	1.	3.70	0.19	49.92	-2.08	-0.08	0.1612	0.0276	0.1621	0.0218	-0.0145	-0.0004	-0.0001	-0.0015	0.006149

		_			_		C	C.	$\mathbf{c}_{\mathtt{L}}$	- C _D	C_	G	C _n	C _Y	C _q
Run	Point	R	М	đ	α	β	_C _N	C _A	CL.	CD	C _m	24	-11	•	•
									0.00/0	0 0079	-0.0130	-0.0005	-0.0002	-0.0018	0.006074
168.	2.	3.70	0.19	49.81	-0.05	-0.08 -0.08	0.2260 0.3017	0.0280 0.0274	0.2260 0.3004	0.0278 0.0384	-0.0130	-0.0008	-0.0001		0.005966
168.	3.	3.70 3.71	0.19 0.19	49.92 50.16	2.10 3.08	-0.08	0.3416	0.0268	0.3397	0.0451	-0.0104	-0.0008	-0.0001		0.005906
168. 168.	4. 5.	3.71	0.19	50.27	4.03	-0.08	0.3789	0.0260	0.3761	0.0526	-0.0090	-0.0005	-0.0001		0.005909 0.005941
168.	6.	3.70	0.19	49.93	4.52	-0.08	0.4004	0.0257	0.3971	0.0572	-0.0083 -0.0073	-0.0005 -0.0006	-0.0001 -0.0002		0.005941
168.	7.	3.70	0.19	49.93	4.99	-0.08	0.4181 0.4370	0.0251 0.0246	0.4144 0.4326	0.0614 0.0665	-0.0073	-0.0009	-0.0003		0.005722
168.	8.	3.70 3.70	0.19 0.19	50.16 50.05	5.51 6.01	-0.08 -0.08	0.4652	0.0251	0.4600	0.0737	-0.0058	-0.0002	-0.0005	-0.0027	0.005881
168. 168.	9. 10.	3.69	0.19	49.94	7.03	-0.08	0.5237	0.0290	0.5162	0.0929	0.0003	-0.0012	-0.0006	-0.0030	0.005891
168.	11.	3.70	0.19	50.07	8.04	-0.08	0.5756	0.0345	0.5651	0.1147	0.0189	-0.0013 -0.0014	-0.0004 -0.0006	-0.0006 -0.0003	0.005966
168.	12.	3.69	0.19	49.96	9.02	-0.08	0.6240 0.6831	0.0364 0.0394	0.6106 0.6657	0.1338 0.1580	0.0258 0.0353	-0.0015	-0.0010	-0.0027	0.005933
168.	13.	3.68	0.19 0.19	49.74 49.76	10.05 12.07	-0.08 -0.08	0.7918	0.0394	0.7649	0.2093	0.0557	0.0005	-0.0031	-0.0072	0.005968
168. 168.	14. 15.	3.68 3.70	0.19	50.15	16.03	-0.08	1.0057	0.0543	0.9516	0.3299	0.1044	0.0044	-0.0072	-0.0140	0.005877
168.	16.	3.70	0.19	50.10	20.00	-0.08	1.2251	0.0647	1.1292	0.4798	0.1624	0.0082	-0.0138	-0.0231	0.005816
							0.1/05	0.0275	0.1633	0.0218	-0.0143	-0.0004	-0.0001	-0.0018	0.003124
169.	1.	3.70	0.19	50.27 49.81	-2.01 -0.05	-0.08 -0.08	0.1625 0.2249	0.0273	0.1033	0.0278	-0.0129	-0.0006	-0.0001	-0.0020	0.003138
169. 169.	2. 3.	3.68 3.70	0.19 0.19	50.38	2.02	-0.08	0.2991	0.0274	0.2980	0.0379	-0.0107	-0.0008	0.0000	-0.0020	0.003021
169.	3. 4.	3.70	0.19	50.50	3.07	-0.08	0.3412	0.0268	0.3393	0.0450	-0.0102	-0.0009	0.0000	-0.0026 -0.0028	0.003052 0.003030
169.	5.	3.70	0.19	50.39	4.05	-0.08	0.3819	0.0264	0.3791	0.0533 0.0575	-0.0085 -0.0081	-0.0006 -0.0004	-0.0001 -0.0001	-0.0029	0.003030
16 9 .	6.	3.69	0.19	50.16	4.50	-0.08 -0.08	0.4008 0.4248	0.0261 0.0266	0.3975 0.4209	0.0636	-0.0071	-0.0003	-0.0002	-0.0033	0.003003
169.	7.	3.68 3.69	0.19 0.19	49.93 50.05	5.00 5.50	-0.08	0.4248	0.0276	0.4491	0.0710	-0.0067	-0.0001	-0.0002	-0.0035	0.003012
169. 169.	8. 9.	3.69	0.19	50.28	6.03	-0.08	0.4792	0.0300	0.4734	0.0801	0.0005	-0.0001	-0.0003	-0.0043	0.002979
169.	10.	3.68	0.19	49.95	7.02	-0.08	0.5289	0.0341	0.5207	0.0985	0.0130	-0.0010	-0.0004 -0.0006	-0.0015 -0.0027	0.0029 99 0.003044
1 69 .	11.	3.69	0.19	50.07	8.01	-0.08	0.5763	0.0359	0.5657 0.6174	0.1158 0.1374	0.0217 0.0303	-0.0011 -0.0011	-0.0000	-0.0027	0.003036
169.	12.	3.68	0.19	49.85	9.05	-0.08 -0.08	0.6313 0.6832	0.0386 0.0409	0.6657	0.1593	0.0386	-0.0009	-0.0014	-0.0045	0.003032
169. 169.	13. 14.	3.68 3.70	0.19 0.19	49.97 50.33	10.03 12.01	-0.08	0.7890	0.0450	0.7623	0.2082	0.0556	0.0003	-0.0031	-0.0075	0.002924
169. 169.	15.	3.68	0.19	49.81	16.06	-0.08	1.0086	0.0549	0.9541	0.3318	0.1051	0.0046	-0.0072	-0.0141	0.003003 0.002878
169.	16.	3.67	0.19	49.75	20.01	-0.08	1.2299	0.0654	1.1333	0.4823	0.1620	0.0069	-0.0119	-0.0209	0.002878
				70.4T	2 007	E 00	0.1558	0.0282	0.1567	0.0225	-0.0190	-0.0032	-0.0049	-0.0103	0.013109
170.	1. 2.	3.69 3.69	0.19 0.19	50.27 50.27	-2.07 0.00	5.08 5.08	0.1336	0.0282	0.1307	0.0287	-0.0161	-0.0042	-0.0051	-0.0130	0.013035
170. 170.	3.	3.69	0.19	50.27	2.01	5.08	0.3022	0.0282	0.3010	0.0387	-0.0147	-0.0051	-0.0042	-0.0129	0.012872
170.	4.	3.68	0.19	50.05	3.02	5.08	0.3423	0.0275	0.3404	0.0455	-0.0137	-0.0060 -0.0067	-0.0045 -0.0050	-0.0136 -0.0147	0.012842 0.012708
170.	5.	3. 69	0.19	50.28	4.00	5.08	0.3804	0.0265	0.3776 0.3983	0.0530 0.0577	-0.0120 -0.0107	-0.0068	-0.0052	-0.0155	0.012592
170.	6.	3.69	0.19	50.39	4.53 5.04	5.08 5.08	0.4016 0.4225	0.0260 0.0257	0.3983	0.0627	-0.0094	-0.0067	-0.0055	-0.0155	0.012613
170. 170.		3.69 3.69	0.19 0.19	50.28 50.28	5.51	5.08	0.4411	0.0255	0.4366	0.0677	-0.0087	-0.0065	-0.0059	-0.0152	0.012591
170.		3.69		50.40	6.03	5.08	0.4692	0.0259	0.4639	0.0750	-0.0087	-0.0052	-0.0068	-0.0134 -0.0054	0.012537 0.012673
170.		3.69		50.29	7.07	5.08	0.5128	0.0276	0.5055	0.0904 0.1066	-0.0009 0.0143	-0.0079 -0.0115	-0.0083 -0.0077	0.0049	0.012973
170.		3.68		50.07	8.00	5.08 5.08	0.5530 0.6002	0.0299 0.0312	0.5435 0.5879	0.1066	0.0143	-0.0130	-0.0073	0.0090	0.012954
170. 170.		3.68 3.68		50.07 50.08	9.04 10.00	5.08	0.6488	0.0324	0.6333		0.0300	-0.0145	-0.0068	0.0097	0.012977
170.		3.68		49.98	12.00	5.08	0.7555	0.0364	0.7315		0.0460	-0.0161	-0.00 69	0.0041 -0.0160	0.012914
170.		3.69		50.15	16.00	5.08	0.9663	0.0474	0.9158		0.0967	-0.0138 -0.0236	-0.0136 -0.0217	-0.0180	0.012705
170.	16.	3.66	0.18	49.29	20.03	5.08	1.2280	0.0596	1.1333	0.4766	0.1461	-0.0250	-0.0217	-0.0200	••••
171		3.68	0.19	50.04	-2.06	-5.06	0.1581	0.0292	0.1590	0.0235	-0.0182	0.0033	0.0039	0.0061	0.013217
171. 171.		3.68		50.16	0.02	-5.06	0.2275	0.0295	0.2275		-0.0158	0.0047	0.0039	0.0062	0.013185
171		3.68		50.16	2.06	-5.06	0.3012	0.0290	0.3000		-0.0139	0.0057	0.0034 0.0036	0.0057 0.0065	0.013079 0.012931
171	. 4.	3.69		50.28	3.03	-5.06	0.3392	0.0284	0.3372 0.3771		-0.0132 -0.0123	0.0061	0.0030	0.0078	0.012930
171		3.69		50.16 50.39	4.02 4.51	-5.06 -5.06	0.3800 0.3970	0.0275 0.0268	0.3771		-0.0123	0.0064		0.0075	0.012843
171 171		3.69 3.70		50.39 50.63	5.00	-5.06	0.4149	0.0263	0.4111		-0.0091	0.0068		0.0079	0.012765
171		3.68		50.05	5.51	-5.06	0.4388	0.0261	0.4343		-0.0088	0.0063		0.0078 0.0081	0.012804 0.012734
171		3.69		50.05	6.00	-5.06	0.4614	0.0259	0.4562		-0.00 8 5 -0.0036			0.0061	0.012/34
171	. 10.	3.69		50.29	7.01	-5.06	0.5010 0.5474	0.0261 0.0291	0.4941					-0.0070	0.012361
171		3.69		50.18 49.96	8.01 9.02	-5.06 -5.06	0.5939	0.0300	0.5818					-0.0105	0.012155
171 171		3.68 3.69			10.03	-5.06	0.6474	0.0319	0.6320	0.1441	0.0236	0.0112		-0.0136	0.012118
171				49.99	12.02	-5.06	0.7521	0.0388	0.7275					-0.0115 -0.0199	0.012304 0.012216
171			8 0.19	49.92	16.01	-5.06	0.9661	0.0511	0.9145	0.3156	0.1007	0.0192	0.0004	-V.V137	V.V.1221V

Run	Point	R	М	q	α	β	C _N	C _A	$\mathbf{c}_{\mathtt{L}}$	c_{D}	C _m	G	C _a	C _Y	Cq
171.	16.	3.69	0.19	50.10	20.03	-5.06	1.1681	0.0649	1.0752	0.4611	0.1715	0.0275	-0.0119	-0.0390	0.012403
172.	2.	3.81	0.19	50.28	-6.02	0.00	0.0045	0.0344	0.0081	0.0337	-0.0156	-0.0008	0.0000	0.0035	0.013262
172.	3.	3.80	0.19	50.05	-4.07	0.00	0.0782	0.0349	0.0804	0.0293	-0.0124	-0.0005	-0.0001	0.0026	0.013310
172.	4.	3.79	0.19	49.93	-2.07	0.00	0.1461	0.0339	0.1472	0.0286	-0.00 99	-0.0004	-0.0002	0.0021	0.013322
172.	5.	3.78	0.19	49.93	0.01	0.00	0.2134	0.0318	0.2134	0.0318	-0.0084	-0.0005	-0.0002	0.0015	0.013287
172.	6.	3.78	0.19	49.93	2.06	0.00	0.2816	0.0288	0.2804	0.0389	-0.0038	-0.0008	-0.0001	0.0013	0.013163
172.	7.	3.79	0.19	50.16	3.01	0.00	0.3127	0.0271	0.3109	0.0435	-0.0013	-0.0007	-0.0002	0.0012	0.013028
172.	8.	3.79	0.19	50.28	4.03	0.00	0.3497	0.0250	0.3471	0.0496	0.0015	-0.0008	-0.0003	0.0009	0.012932
172	9. 10.	3.78 3.77	0.19	49.93	4.56	0.00	0.3675	0.0238	0.3644	0.0530	0.0032	-0.0009	-0.0004	0.0009	0.012971
172. 172.	11.	3.78	0.19 0.19	49.82	5.03	0.00	0.3854	0.0227	0.3819	0.0564	0.0046	-0.0008	-0.0005	0.0006	0.012907
172.	12.	3.78	0.19	49.93 49.94	5.53 6.07	0.00 0.00	0.4029 0.4219	0.0212	0.3990	0.0599	0.0061	-0.0008	-0.0006	0.0003	0.012813
172.	13.	3.77	0.19	49.82	7.02	0.00	0.4219	0.019 8 0.0177	0.4174	0.0643	0.0076	-0.0006	-0.0006	0.0001	0.012735
172	14.	3.78	0.19	49.94	7.97	0.00	0.4955	0.0177	0.4512 0.4884	0.0733	0.0111	-0.0005	-0.0007	-0.0011	0.012636
172	15.	3.78	0.19	50.07	9.08	0.00	0.5557	0.0164		0.0849	0.0151	-0.0006	-0.0009	-0.0023	0.012497
172.	16.	3.77	0.19	49.73	10.02	0.00	0.6111	0.0171	0.5460 0.5985	0.1045	0.0241	-0.0007	-0.0020	0.0030	0.012654
172.	17.	3.77	0.19	49.98	12.05	0.00	0.7329	0.0190	0.7116	0.1250 0.1771	0.0315 0.0529	0.0000	-0.0018	0.0008	0.012669
172	18.	3.78	0.19	50.03	16.03	0.00	0.9607	0.0383	0.7118	0.1771	0.0329	0.0021 0.0043	-0.0037 -0.0067	-0.0087	0.012570
172	19.	3.77	0.19	49.86	19.98	0.00	1.1862	0.0500	1.0977	0.4523	0.1120	0.0043	-0.0067	-0.0107 -0.0184	0.012781
			,	17100	13.50	. 0.00	1.1002	0.000	1.0777	0.4025	0.1730	0.0059	-0.0100	-0.0184	0.012625
173.	1.	3.77	0.19	49.94	-6.05	4.99	-0.0064	0.0312	-0.0030	0.0317	-0.0201	0.0025	-0.0036	-0.0057	0.013402
173.	2.	3.77	0.19	50.16	-4.00	5.00	0.0680	0.0323	0.0701	0.0274	-0.0164	0.0025	-0.0037	-0.0058	0.013402
173.	3.	3.78	0.19	50.16	-2.05	5.00	0.1369	0.0318	0.1379	0.0269	-0.0139	-0.0014	-0.0037	-0.0067	0.013363
173.	4.	3.77	0.19	50.16	0.02	5.00	0.2074	0.0299	0.2074	0.0300	-0.0110	-0.0034	-0.0042	-0.0089	0.013202
173.	5.	3.77	0.19	50.04	2.02	5.00	0.2774	0.0273	0.2762	0.0371	-0.0066	-0.0058	-0.0038	-0.0082	0.013115
173.	6.	3.77	0.19	50.05	3.08	5.00	0.3145	0.0254	0.3127	0.0422	-0.0034	-0.0077	-0.0050	-0.0083	0.012990
173.	7.	3.78	0.19	50.28	4.02	5.00	0.3458	0.0233	0.3433	0.0475	-0.0013	-0.0077	-0.0049	-0.0103	0.012841
173.	8.	3.78	0.19	50.39	4.53	5.00	0.3648	0.0221	0.3619	0.0509	0.0002	-0.0082	-0.0052	-0.0104	0.012835
173.	9.	3.78	0.19	50.28	5.03	5.00	0.3839	0.0210	0.3806	0.0546	0.0017	-0.0082	-0.0057	-0.0118	0.012743
173.	10.	3.78	0.19	50.39	5.53	5.00	0.4030	0.0201	0.3992	0.0588	0.0034	-0.0089	-0.0063	-0.0102	0.012730
173.	11.	3.77	0.19	50.05	6.05	5.00	0.4237	0.0190	0.4194	0.0636	0.0053	-0.0090	-0.0067	-0.0095	0.012712
173.	12.	3.76	0.19	49.94	7.06	5.00	0.4696	0.0192	0.4637	0.0767	0.0130	-0.0108	-0.0084	-0.0015	0.012828
173.	13.	3.76	0.19	49.83	8.01	5.00	0.5110	0.0183	0.5034	0.0894	0.0185	-0.0117	-0.0094	0.0024	0.012897
173.	14.	3.77	0.19	50.07	9.07	5.00	0.5635	0.0206	0.5532	0.1092	0.0307	-0.0139	-0.0086	0.0130	0.013027
173.	15.	3.76	0.19	49.96	10.00	5.00	0.6075	0.0212	0.5945	0.1264	0.0387	-0.0148	-0.0082	0.0140	0.013109
173.	16.	3.76	0.19	49.86	12.03	5.00	0.7010	0.0244	0.6805	0.1700	0.0594	-0.0145	-0.0078	0.0079	0.013089
173.	17.	3.76	0.19	49.91	16.08	5.00	0.9397	0.0327	0.8938	0.2918	0.1075	-0.0188	-0.0163	-0. 0099	0.012970
173.	18.	3.76	0.19	50.09	20.02	5.00	1.1714	0.0432	1.0858	0.4417	0.1604	-0.0213	-0.0245	-0.0167	0.012749
174.	2.	3.87	0.19	50.05	-6.08	-5.00	-0.0021	0.0337	0.0015	0.0337	-0.0219	-0.00 09	0.0042	0.0120	0.000000
174.	3.	3.87	0.19	50.39	-4.06	-5.00	0.0716	0.0345	0.0739	0.0294	-0.0158	0.0000	0.0034	0.0105	0.000000
174.	4.	3.86	0.19	50.27	-2.06	-5.00	0.1418	0.0339	0.1429	0.0287	-0.0128	0.0016	0.0037	0.0098	0.000000
174. 174.	5.	3.85	0.19	50.16	-0.05	-5.00	0.2088	0.0319	0.2089	0.0317	-0.0104	0.0037	0.0037	0.0094	0.000000
174. 174.	6. 7.	3.84 3.84	0.19	50.04	2.06	-5.00	0.2799	0.0289	0.2787	0.0390	-0.0052	0.0063	0.0035	0.0076	0.000000
174.	7. 8.	3.83	0.19 0.19	50.04 49.82	3.06 4.03	-5.00 -5.00	0.3167	0.0279	0.3147	0.0448	-0.0013	0.0073	0.0042	0.0056	0,000000
174.	9.	3.84	0.19	50.16	4.50	-5.00 -5.00	0.3570 0.3752	0.0278	0.3541	0.0528	0.0039	0.0084	0.0048	0.0012	0.000000
174.	10.	3.84	0.19	50.16	5.02	-5.00 -5.00	0.3732	0.0276 0.0275	0.3719	0.0570	0.0065	0.0086	0.0049	-0.0010	0.000000
174.	11.	3.83	0.19	50.05	5.57	-5.00 -5.00	0.3970	0.0273	0.3931 0.4150	0.0621 0.0678	0.0096 0.0135	0.0091 0.0093	0.0048 0.0048	-0.0018	0.000000
174.	12.	3.84	0.19	50.17	6.08	-5.00	0.4395	0.0272	0.4130	0.0078	0.0133	0.0096	0.0048	-0.0033	0.000000
174.	13.	3.84	0.19	50.17	7.02	-5.00	0.4810	0.0270	0.4740	0.0754	0.0243	0.0093	0.0048	-0.0040 -0.0045	0.000000
174.	14.	3.83	0.19	50.06	8.10	-5.00	0.5352	0.0272	0.5259	0.1027	0.0243	0.0103	0.0048	-0.0032	0.000000
174.	15.	3.82	0.19	49.84	9.01	-5.00	0.5858	0.0275	0.5741	0.1027	0.0324	0.0119	0.0050	-0.0019	0.000000
174.	16.	3.89	0.19	51.69	10.04	-5.00	0.6373	0.0301	0.6223	0.1199	0.0393	0.0157	0.0055	-0.0019	0.000000
174.	17.	3.83	0.19	50.09	12.07	-5.00	0.7466	0.0329	0.7232	0.1483	0.0682	0.0157	0.0063	-0.0007	0.000000
174.	18.	3.83	0.19	50.14	16.06	-5.00	0.9647	0.0411	0.9157	0.3065	0.1143	0.0257	0.0058	-0.0137	0.000000
174.	19.	3.81	0.19	49.62	20.00	-5.00	1.1360	0.0501	1.0503	0.4358	0.1756	0.0252	-0.0017	-0.0304	0.000000
175.	2.	3.89	0.19	50.28	-6.05	-5.00	-0.0012	0.0395	0.0030	0.0394	-0.0216	-0.0012	0.0036	0.0100	0.013225
175.	3.	3.89	0.19	50.39	-4.02	-5.00	0.0732	0.0403	0.0758	0.0351	-0.0164	0.0001	0.0033	0.0084	0.013213
175.	4.	3.88	0.19	50.16	-2.04	-5.00	0.1420	0.0398	0.1433	0.0347	-0.0134	0.0016	0.0036	0.0087	0.013252
175.	5.	3.88	0.19	50.28	-0.05	-5.00	0.2089	0.0378	0.2089	0.0376	-0.0110	0.0036	0.0037	0.0087	0.013237
175.	6.	3.88	0.19	50.28	2.02	-5.00	0.2789	0.0347	0.2775	0.0445	-0.0063	0.0064	0.0035	0.0070	0.013091
175.	7.	3.87	0.19	50.16	3.01	-5.00	0.3138	0.0327	0.3116	0.0492	-0.0038	0.0072	0.0039	0.0077	0.013046

Run	Point	R	М	q	α	β	C _N	C _A	CL	C_D	C _m	G	C _n	C _Y	Cq
175.	8.	3.88	0.19	50.39	4.03	-5.00	0.3482	0.0304	0.3452	0.0548	-0.0009	0.0079	0.0042	0.0078	0.012950
175. 175.	9.	3.86	0.19	50.16	4.51	-5.00	0.3659	0.0291	0.3625	0.0578	0.0005	0.0082	0.0043	0.0078	0.012816
175.	10.	3.87	0.19	50.28	5.07	-5.00	0.3846	0.0279	0.3807	0.0617	0.0025	0.0087	0.0046	0.0078	0.012895
175.	11.	3.86	0.19	50.17	5.51	-5.00	0.4007	0.0271	0.3962	0.0654	0.0038	0.0089	0.0050	0.0077	0.012720
175.	12.	3.86	0.19	50.17	6.00	-5.00	0.4212	0.0260	0.4161	0.0699	0.0058	0.0093	0.0052	0.00 69 0.0045	0.012746 0.012630
175.	13.	3.85	0.19	49.94	7.06	-5.00	0.4646	0.0240	0.4581 0.5018	0.0809 0.0960	0.0103 0.0196	0.0098 0.0116	0.0060 0.0073	-0.0056	0.012630
175.	14.	3.85	0.19	50.06 50.07	8.03 9.05	-5.00 -5.00	0.5103 0.5557	0.0250 0.0243	0.5449	0.0900	0.0196	0.0116	0.0073	-0.0085	0.012324
175. 175.	15. 16.	3.85 3.84	0.19 0.19	49.96	10.05	-5.00	0.6065	0.0253	0.5928	0.1308	0.0335	0.0134	0.0078	-0.0105	0.012264
175.	17.	3.83	0.19	49.75	12.06	-5.00	0.7108	0.0308	0.6886	0.1787	0.0584	0.0145	0.0059	-0.0090	0.012343
175.	18.	3.84	0.19	49.91	16.09	-5.00	0.9233	0.0416	0.8756	0.2959	0.1111	0.0199	0.0028	-0.0191	0.012283
175.	19.	3.84	0.19	49.98	20.03	-5.00	1.1412	0.0547	1.0535	0.4423	0.1737	0.0234	0.0054	-0.0198	0.012440
176.	1.	3.84	0.19	50.28	-6.03	0.05	-0.0008	0.0304	0.0024	0.0304	-0.0161	-0.0008	0.0003	-0.0001	0.000000
176.	2.	3.83	0.19	50.16	-4.02	0.05	0.0757	0.0315	0.0777	0.0261	-0.0120	-0.0005	0.0001	-0.0008	0.000000
176.	3.	3.83	0.19	50.15	-2.05	0.05	0.1444	0.0307	0.1454	0.0255	-0.0095	-0.0004	0.0001	-0.0015 -0.0016	0.000000
176.	4.	3.82	0.19	49.81	-0.06	0.05	0.2091	0.0292	0.2092 0.27 <i>6</i> 7	0.0290 0.0366	-0.0081 -0.0038	-0.0006 -0.0008	0.0001 0.0002	-0.0016	0.000000
176.	5.	3.81	0.19	49.6 9	2.03 3.08	0.05 0.05	0.2778 0.3156	0.0267 0.0252	0.2767	0.0300	-0.0008	-0.0008	0.0001	-0.0019	0.000000
176. 176.	6. 7.	3.83 3.84	0.19 0.19	50.16 50.39	4.05	-0.02	0.3130	0.0243	0.3501	0.0491	0.0028	-0.0007	-0.0001	-0.0015	0.000000
176.	7. 8.	3.83	0.19	50.27	4.51	-0.02	0.3712	0.0238	0.3681	0.0529	0.0056	-0.0007	0.0000	-0.0022	0.000000
176.	9.	3.83	0.19	50.16	5.04	-0.02	0.3932	0.0237	0.3896	0.0581	0.0098	-0.0008	0.0000	-0.0024	0.000000
176.	10.	3.82	0.19	50.05	5.56	-0.02	0.4204	0.0245	0.4160	0.0651	0.0136	-0.0008	-0.0002	-0.0019	0.000000
176.	11.	3.83	0.19	50.28	6.02	-0.02	0.4416	0.0252	0.4365	0.0714	0.0169	-0.0005 -0.0006	-0.0002 -0.0004	-0.0015 -0.0013	0.000000
176.	12.	3.82	0.19	50.06	7.08	-0.02	0.4981 0.5455	0.0271 0.0277	0.4909 0.5362	0.0883 0.1038	0.0255 0.0327	-0.0006	-0.0007	-0.0013	0.000000
176. 176.	13. 14.	3.83 3.82	0.19 0.19	50.29 50.07	8.05 8.97	-0.02 -0.02	0.5942	0.0277	0.5825	0.1209	0.0400	-0.0004	-0.0011	-0.0026	0.000000
176.	15.	3.82	0.19	50.08	10.02	-0.02	0.6465	0.0297	0.6314	0.1417	0.0483	0.0000	-0.0014	-0.0037	0.000000
176.	16.	3.80	0.19	49.75	12.04	-0.02	0.7545	0.0322	0.7312	0.1890	0.0688	0.0009	-0.0028	-0.0073	0.000000
176.	17.	3.79	0.18	49.45	16.00	-0.02	0.9677	0.0394	0.9194	0.3046	0.1170	0.0043	-0.0065	-0.0147	0.000000
176.	18.	3.81	0.19	50.09	20.05	-0.02	1.1963	0.0506	1.1064	0.4578	0.1739	0.0019	-0.0043	-0.0114	0.000000
177.	1.	3.80	0.19	49.82	-6.02	5.00	-0.0056	0.0297	-0.0025	0.0301	-0.0214	0.0020	-0.0040	-0.0106	0.000000
177.	2.	3.81	0.19	50.16	-4.08	5.00	0.0653	0.0307	0.0673	0.0259	-0.0167	0.0005	-0.0035 -0.0037	-0.0099 -0.0102	0.000000
177.	3.	3.80	0.19	49.92	-2.09	5.00	0.1364 0.2130	0.0303 0.0284	0.1374 0.2129	0.0253 0.0287	-0.0139 -0.0104	-0.0014 -0.0037	-0.0037	-0.0102	0.000000
177. 177.	4. 5.	3.80 3.80	0.19 0.19	49.81 49.92	0.10 2.01	5.00 5.00	0.2130	0.0266	0.2800	0.0365	-0.0056	-0.0060	-0.0038	-0.0094	0.000000
177.	5. 6.	3.80	0.19	49.93	3.05	5.00	0.3231	0.0266	0.3212	0.0438	-0.0005	-0.0074	-0.0046	-0.0058	0.000000
177.	7.	3.80	0.19	50.04	4.06	5.00	0.3631	0.0262	0.3604	0.0518	0.0045	-0.0085	-0.0053	-0.0030	0.000000
177.	8.	3.82	0.19	50.39	4.51	5.00	0.3791	0.0258	0.3759	0.0555	0.0065	-0.0089	-0.0055	-0.0020	0.000000
177.	9.	3.81	0.19	50.05	5.04	5.00	0.4030	0.0257	0.3992	0.0610	0.0098	-0.0095	-0.0057	-0.0004	0.000000
177.	10.	3.81	0.19	50.28	5.59	5.00	0.4254	0.0255	0.4209	0.0668 0.0721	0.0130 0.0162	-0.0097 -0.0103	-0.0058 -0.0059	-0.0007 0.0002	0.000000
177.	11.	3.80	0.19	50.05 50.06	6.08 7.07	5.00 5.00	0.4446 0.4886	0.0252 0.0254	0.4395 0.4818	0.0721	0.0102	-0.0109	-0.0061	-0.0007	0.000000
177. 177.	12. 13.	3.80 3.80	0.19 0.19	49.83	8.07	5.00	0.5375	0.0260	0.5285	0.1013	0.0319	-0.0123	-0.0061	-0.0021	0.000000
177.	14.	3.79	0.19	49.72	9.08	5.00	0.5890	0.0266	0.5775	0.1192	0.0391	-0.0140	-0.0064	-0.0033	0.000000
177.	15.	3.82	0.19	50.54	10.10	5.00	0.6441	0.0280	0.6293	0.1405	0.0471	-0.0163	-0.0068	-0.0041	0.000000
177.	16.	3.80	0.19	50.09	12.03	5.00	0.7455	0.0303	0.7229	0.1850	0.0641	-0.0189	-0.0088	-0.0066	0.000000
177.	17.	3.80	0.19	50.14	16.08	5.00	0.9709	0.0380	0.9224 1.1029	0.3054 0.4532	0.1117 0.1688	-0.0201 -0.0191	-0.0179 -0.0265	-0.01 69 -0.0235	0.000000
177.	18.	3.80	0.19	49.97	20.04	5.00	1.1914	0.0479							
178.	1.	3.84	0.19	49.93	-6.05	0.00	0.0000	0.0322	0.0034	0.0320	-0.0164	-0.0007 -0.0004	0.0000	0.0013 0.0008	0.000000
178.	2.	3.84	0.19	49.93	-4.00 2.06	0.00	0.0769	0.0328 0.0320	0.0790 0.1452	0.0274	-0.0118 -0.0093	-0.0004	0.0000	0.0004	0.000000
178. 178.	3. 4.	3.82 3.84	0.19 0.19	49. 69 50.27	-2.06 -0.09	0.00 0.00	0.1442 0.2077	0.0320	0.1432	0.0299	-0.0093	-0.0004	0.0000	-0.0003	0.000000
178.	5 .	3.82	0.19	49.81	2.04	0.00	0.2783	0.0275	0.2771	0.0374	-0.0034	-0.0008	0.0000	-0.0001	0.000000
178.	6.	3.84	0.19	50.27	3.08	0.00	0.3165	0.0257	0.3147	0.0426	-0.0004	-0.0008	-0.0001	-0.0003	0.000000
178.	7.	3.83	0.19	50.16	4.07	0.00	0.3516	0.0240	0.3490	0.0489	0.0027	-0.0008	-0.0002	-0.0002	0.000000
178.	8.	3.82	0.19	49.93	4.57	0.00	0.3714	0.0236	0.3684	0.0531	0.0052	-0.0009	-0.0003 -0.0002	-0.0008 -0.0011	0.000000
178.	9.	3.82	0.19	49.93	5.01	0.00	0.3914	0.0232 0.0233	0.3879 0.4074	0.0573 0.0627	0.0083 0.0120	-0.0007 -0.0008	-0.0002	-0.0011	0.000000
178.	10.	3.83 3.82	0.19 0.19	50.05 50.05	5.51 6.00	0.00 0.00	0.4116 0.4355	0.0233	0.4074	0.0695	0.0120	-0.0007	-0.0004	-0.0022	0.000000
178. 178.	11. 12.	3.82	0.19	50.06	7.02	0.00	0.4878	0.0256	0.4810	0.0850	0.0230	-0.0006	-0.0005	-0.0020	0.000000
178.	13.	3.82	0.19	49.95	8.01	0.00	0.5408	0.0271	0.5318	0.1022	0.0312	-0.0001	-0.0006	-0.0028	0.000000
178.		3.83	0.19	50.30	9.03	0.00	0.5903	0.0279	0.5787	0.1201	0.0386	-0.0003	-0.0010	-0.0033	0.000000

Run	Point	R	М	q	α	В	C _N	C _A	C_{L}	C _D	C _m	G	C _n	$\mathbf{c}_{\mathbf{Y}}$	Cq
178.	15.	3.82	0.19	50.08	10.01	0.00	0.6463	0.0294	0.6314	0.1413	0.0477	-0.0001	-0.0016	-0.0023	0.000000
178.	16.	3.81	0.19	49.98	12.01	0.00	0.7509	0.0319	0.7278	0.1875	0.0674	0.0011	-0.0030	-0.0062	0.000000
178.	17.	3.81	0.19	49.91	16.02	0.00	0.9662	0.0376	0.9183	0.3029	0.1121	0.0059	-0.0069	-0.0180	0.000000
178.	18.	3.81	0.19	49.91	16.02	0.00	0.9656	0.0378	0.9176	0.3028	0.1121	0.0061	-0.0073	-0.0189	0.000000
178.	19.	3.81	0.19	49.97	20.01	0.00	1.1701	0.0467	1.0834	0.4444	0.1735	0.0065	-0.0123	-0.0251	0.000000
179.	1.	3.81	0.19	50.05	`-6.05	5.00	-0.0063	0.0307	-0.0030	0.0312	-0.0211	0.0022	-0.0038	-0.0083	0.000000
179.	2.	3.82	0.19	50.27	-4.09	5.00	0.0651	0.0312	0.0672	0.0265	-0.0166	0.0003	-0.0036	-0.0073	0.000000
179.	3.	3.80	0.19	49.81	-2.05	5.00	0.1367	0.0305	0.1377	0.0256	-0.0135	-0.0015	-0.0039	-0.0060	0.000000
179.	4.	3.81	0.19	50.04	-0.01	5.00	0.2062	0.0286	0.2062	0.0286	-0.0105	-0.0036	-0.0041	-0.0098	0.000000
179.	5.	3.81	0.19	50.15	2.05	5.00	0.2776	0.0263	0.2765	0.0363	-0.0057	-0.0063	-0.0038	-0.0077	0.000000
179. 179.	6. 7.	3.81 3.79	0.19	50.16 49.47	3.08 4.02	5.00 5.00	0.3196	0.0259	0.3177	0.0430	-0.0006	-0.0075	-0.0047	-0.0053	0.000000
179. 179.	7. 8.	3.81	0.19	50.16	4.52	5.00	0.3574 0.3770	0.0257	0.3547	0.0507	0.0039	-0.0083	-0.0055	-0.0021	0.000000
179.	9.	3.82	0.19	50.10	5.02	5.00	0.3770	0.0253 0.0248	0.3738 0.3944	0.0549 0.0596	0.0064	-0.0090	-0.0055	0.0004	0.000000
179.	10.	3.81	0.19	50.28	5.50	5.00	0.4183	0.0244	0.3944	0.0644	0.0093	-0.0093 -0.0098	-0.0060 -0.0063	0.0014 0.0025	0.000000
179.	11.	3.82	0.19	50.28	6.08	5.00	0.4412	0.0241	0.4362	0.0707	0.0117	-0.0103	-0.0065	0.0023	0.000000
179.	12.	3.81	0.19	50.17	7.04	5.00	0.4834	0.0237	0.4769	0.0828	0.0219	-0.0108	-0.0067	0.0038	0.000000
179.	13.	3.81	0.19	50.18	8.04	5.00	0.5294	0.0246	0.5207	0.0984	0.0303	-0.0103	-0.0063	0.0010	0.000000
179.	14.	3.81	0.19	50.07	9.00	5.00	0.5829	0.0259	0.5717	0.1167	0.0366	-0.0117	-0.0063	-0.0019	0.000000
179.	15.	3.80	0.19	49.96	10.02	5.00	0.6366	0.0264	0.6223	0.1368	0.0436	-0.0152	-0.0067	-0.0038	0.000000
179.	16.	3.80	0.19	49.86	12.09	5.00	0.7450	0.0286	0.7224	0.1840	0.0627	-0.0179	-0.0091	-0.0080	0.000000
179.	17.	3.81	0.19	50.14	16.03	5.00	0.9648	0.0352	0.9175	0.3003	0.1079	-0.0190	-0.0183	-0.0204	0.000000
179.	18.	3.81	0.19	49.97	20.03	5.00	1.1908	0.0455	1.1032	0.4506	0.1676	-0.0174	-0.0274	-0.0273	0.000000
180.	1.	3.80	0.19	49.93	-6.02	-5.00	-0.0045	0.0317	-0.0011	0.0320	-0.0219	-0.0012	0.0038	0.0091	0.000000
180.	2.	3.81	0.19	50.27	-4.01	-5.00	0.0689	0.0321	0.0710	0.0320	-0.0219	0.0000	0.0038	0.0077	0.000000
180.	3.	3.81	0.19	50.27	-2.03	-5.00	0.1365	0.0316	0.0710	0.0267	-0.0139	0.0005	0.0033	0.0077	0.000000
180.	4.	3.81	0.19	50.38	-0.10	-5.00	0.2028	0.0299	0.2029	0.0295	-0.0156	0.0015	0.0037	0.0070	0.000000
180.	5.	3.80	0.19	50.27	2.02	-5.00	0.2733	0.0269	0.2722	0.0365	-0.0057	0.0062	0.0035	0.0066	0.000000
180.	6.	3.81	0.19	50.39	3.03	-5.00	0.3102	0.0260	0.3084	0.0423	-0.0020	0.0074	0.0042	0.0052	0.000000
180.	7.	3.81	0.19	50.50	4.02	-5.00	0.3486	0.0255	0.3460	0.0498	0.0034	0.0085	0.0049	0.0013	0.000000
180.	8.	3.80	0.19	50.16	4.50	-5.00	0.3706	0.0257	0.3674	0.0547	0.0062	0.0089	0.0050	-0.0015	0.000000
180.	9.	3.80	0.19	50.28	5.09	-5.00	0.3942	0.0255	0.3904	0.0604	0.0097	0.0095	0.0053	-0.0037	0.000000
180.	10.	3.79	0.19	50.05	5.53	-5.00	0.4128	0.0252	0.4085	0.0648	0.0120	0.0098	0.0053	-0.0047	0.000000
180.	11.	3.79	0.19	50.05	6.05	-5.00	0.4349	0.0249	0.4298	0.0706	0.0155	0.0103	0.0055	-0.0066	0.000000
180.	12.	3.79	0.19	49.94	7.06	-5.00	0.4785	0.0247	0.4718	0.0833	0.0227	0.0110	0.0055	-0.0071	0.000000
180.	13.	3.79	0.19	49.95	8.04	-5.00	0.5223	0.0255	0.5136	0.0983	0.0309	0.0113	0.0051	-0.0062	0.000000
180.	14.	3.80	0.19	50.07	9.08	-5.00	0.5785	0.0265	0.5671	0.1175	0.0395	0.0131	0.0051	-0.0050	0.000000
180.	15.	3.79	0.19	50.08	10.09	-5.00	0.6336	0.0275	0.6190	0.1381	0.0468	0.0151	0.0058	-0.0043	0.000000
180.	16.	3.79	0.19	49.98	12.04	-5.00	0.7417	0.0299	0.7192	0.1840	0.0635	0.0194	0.0067	-0.0063	0.000000
180.	17.	3.80	0.19	50.37	16.08	-5.00	0.9633	0.0390	0.9149	0.3042	0.1076	0.0288	0.0034	-0.0217	0.000000
180.	18.	3.79	0.19	49.97	20.04	-5.00	1.1070	0.0478	1.0236	0.4242	0.1740	0.0250	-0.0049	-0.0358	0.000000
181.	2.	3.82	0.19	50.28	-6.01	0.00	-0.0004	0.0309	0.0029	0.0308	-0.0160	-0.0008	0.0001	0.0016	0.000000
181.	3./	3.82	0.19	50.27	-4 .10	0.00	0.0725	0.0318	0.0746	0.0265	-0.0120	-0.0005	0.0000	0.0014	0.000000
181.	4.	3.82	0.19	50.38	-2.07	0.00	0.1432	0.0311	0.1443	0.0259	-0.0094	-0.0004	-0.0001	0.0008	0.000000
181.	5.	3.79	0.19	49.81	0.02	0.00	0.2110	0.0296	0.2110	0.0297	-0.0079	-0.0005	0.0000	0.0003	0.000000
181.	6.	3.80	0.19	49.92	2.04	0.00	0.2799	0.0271	0.2788	0.0371	-0.0036	-0.0008	0.0000	0.0006	0.000000
181.	7.	3.80	0.19	50.04	3.02	0.00	0.3129	0.0257	0.3111	0.0421	-0.0009	-0.0007	0.0000	0.0001	0.000000
181. 181.	8. 9.	3.82 3.81	0.19 0.19	50.50 50.27	4.01 4.55	0.00	0.3522 0.3734	0.0245	0.3496	0.0491	0.0026	-0.0007	-0.0002	0.0005	0.000000
181.	10.	3.81	0.19	50.39	5.02	0.00 0.00	0.3734	0.0241	0.3704	0.0536	0.0054	-0.0009	-0.0002	0.0005	0.000000
181.	11.	3.81	0.19	50.39	5.51	0.00	0.3918	0.0237 0.0242	0.3882 0.4078	0.0579 0.0636	0.0093 0.0129	-0.0010 -0.0008	-0.0004 -0.0004	0.0001 0.0006	0.000000
181.	12.	3.81	0.19	50.28	6.01	0.00	0.4121	0.0242	0.4343	0.0030	0.0129	-0.0005	-0.0004	0.0009	0.000000
181.	13.	3.81	0.19	50.40	7.00	0.00	0.4913	0.0272	0.4343	0.0868	0.0248	-0.0005	-0.0005	0.0004	0.000000
181.	14.	3.81	0.19	50.41	8.03	0.00	0.5437	0.0279	0.5345	0.1036	0.0323	-0.0006	-0.0009	-0.0005	0.000000
181.	15.	3.80	0.19	50.18	9.06	0.00	0.5982	0.0290	0.5861	0.1228	0.0407	-0.0004	-0.0012	-0.0010	0.000000
181.	16.	3.80	0.19	50.08	10.06	0.00	0.6514	0.0303	0.6361	0.1436	0.0495	-0.0001	-0.0015	-0.0022	0.000000
181.	17.	3.78	0.19	49.75	12.03	0.00	0.7542	0.0330	0.7307	0.1895	0.0690	0.0009	-0.0029	-0.0057	0.000000
181.	18.	3.80	0.19	50.14	16.03	0.00	0.9683	0.0404	0.9195	0.3063	0.1187	0.0044	-0.0066	-0.0133	0.000000
181.	19.	3.79	0.19	50.09	20.02	0.00	1.1860	0.0502	1.0971	0.4533	0.1748	0.0064	-0.0105	-0.0196	0.000000
182. 182.	2. 3.	4.12 4.12	0.18 0.18	50.05 50.39	-6.00 -5.04	4.98 4.98	-0.0007 0.0327	0.0326 0.0326	0.0027 0.0354	0.0325 0.0296	-0.0210 -0.0180	0.0020 0.0014	-0.0039 -0.0036	-0.0075 -0.0074	0.000000

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Run	Point	R	M	q	α	β	_ C _N	C_{A}	C_{L}	c_{D}	C _m	q	C _n	$C_{\mathbf{Y}}$	$C_{\mathbf{q}}$
				•		β.	± C _N	^	-	•	ü	. Ч 	- 4	-1	-q
							` `								
182.	4.	4.12	0.18	50.27	-3.99	4.98	0.0732	0.0326	0.0753	0.0274	-0.0159	0.0004	-0.0034	-0.0070	0.000000
182.	5.	4.10	0.18	50.04	-3.03	4.98	0.1074	0.0324	0.1090	0.0267	-0.0149	-0.0008	-0.0035	-0.0072	0.000000
182.	6.	4.11	0.18	50.15	-2.03	4.98	0.1422	0.0317	0.1432	0.0266	-0.0139	-0.0018	-0.0038	-0.0078	0.000000
182. 182.	7. 8.	4.10 4.09	0.18 0.18	50.04 49.92	-1.04 -0.02	4.98 4.98	0.1761 0.2097	0.0308 0.0296	0.1766 0.2097	0.0277 0.0295	-0.0126 -0.0107	-0.0027 -0.0037	-0.0041 -0.0040	-0.0089 -0.0102	0.000000
182.	9.	4.09	0.18	49.93	2.00	4.98	0.2815	0.0296	0.2804	0.0293	-0.0053	-0.0061	-0.0038	-0.0102	0.000000
182	10.	4.10	0.18	50.16	4.05	4.98	0.3635	0.0262	0.3607	0.0518	0.0045	-0.0084	-0.0054	-0.0017	0.000000
182.	11.	4.10	0.18	50.28	6.07	4.98	0.4420	0.0249	0.4369	0.0714	0.0162	-0.0103	-0.0060	0.0017	0.000000
182.	12.	4.09	0.18	50.17	8.03	4.98	0.5316	0.0251	0.5228	0.0991	0.0310	-0.0119	-0.0061	0.0004	0.000000
182.	13.	4.08	0.18	49.96	10.06	4.98	0.6409	0.0268	0.6264	0.1384	0.0467	-0.0165	-0.0068	-0.0022	0.000000
182.	14.	4.08	0.18	50.09	12.03	4.98	0,7447	0.0289	0.7223	0.1836	0.0649	-0.0189	-0.0089	-0.0044	0.000000
182.	15.	4.08	0.18	50.11	14.06	4.98	0.8556	0.0322	0.8222	0.2391	0.0866	-0.01 99	-0.0126	-0.0099	0.000000
182. 182.	16. 17.	4.08 4.07	0.18	50.02	16.04	4.98	0.9668	0.0357	0.9193	0.3014	0.1098	-0.0203	-0.0179	-0.0163	0.000000
182	18.	4.06	0.18 0.18	49.82 49.74	17.99 20.05	4.98 4.98	1.0776	0.0399	1.0126	0.3708	0.1369	-0.0202	-0.0235	-0.0226	0.000000
102	10.	4.00	0.10	47.74	20.03	4.70	1.1900	0.0452	1.1024	0.4504	0.1702	-0.0194	-0.0290	-0.0288	0.000000
183.	1.	4.07	0.18	50.16	-6.08	-5.05	-0.0055	0.0309	-0.0022	0.0313	-0.0221	-0.0012	0.0042	0.0106	0.000000
£ 183.	2.	4.07	0.18	50.39	-5.02	-5.05	0.0321	0.0312	0.0347	0.0283	-0.0187	-0.0007	0.0038	0.0100	0.000000
183.	3.	4.07	0.18	50.39	-4.02	-5.05	0.0688	0.0313	0.0708	0.0264	-0.0158	-0.0001	0.0035	0.0094	0.000000
183.	4.	4.05	0.18	49.93	-3.05	-5.05	0.1016	0.0311	0.1031	0.0257	-0.0144	0.0006	0.0036	0.0084	0.000000
183.	5.	4.05	0.18	50.04	-2.02	-5.05	0.1370	0.0308	0.1380	0.0260	-0.0129	0.0015	0.0037	0.0068	0.000000
183.	6.	4.06	0.18	50.15	-1.04	-5.05	0.1698	0.0298	0.1703	0.0267	-0.0118	0.0024	0.0038	0.0088	0.000000
183.	7.	4.05	0.18	49.92	0.04	-5.05	0.2060	0.0286	0.2060	0.0287	-0.0104	0.0037	0.0038	0.0087	0.000000
183. 183.	8. 9.	4.05 4.06	0.18 0.18	50.04 50.27	2.04 4.04	-5.05 -5.05	0.2737 0.3502	0.0259 0.0247	0.2726 0.3476	0.0356	-0.0054	0.0065	0.0038	0.0068	0.000000
183.	10.	4.05	0.18	50.16	6.04	-5.05	0.3302	0.0247	0.4308	0.0494 0.0704	0.0035 0.0168	0.0085 0.0098	0.0050 0.0051	0.0008 -0.0042	0.000000
183.	11.	4.04	0.18	50.06	8.05	-5.05	0.5309	0.0259	0.5221	0.1000	0.0319	0.0038	0.0051	-0.0039	0.000000
183.	12	4.03	0.18	49.84	10.01	-5.05	0.6347	0.0276	0.6202	0.1375	0.0487	0.0158	0.0058	-0.0026	0.000000
183.	13.	4.02	0.18	49.63	12.02	-5.05	0.7453	0.0309	0.7225	0.1854	0.0684	0.0197	0.0064	-0.0022	0.000000
183.	14.	4.03	0.18	50.11	14.01	-5.05	0.8486	0.0343	0.8151	0.2386	0.0895	0.0235	0.0060	-0.0083	0.000000
183.	15.	4.03	0.18	50.02	16.05	-5.05	0.9649	0.0391	0.9165	0.3044	0.1149	0.0278	0.0038	-0.0192	0.000000
183.	16.	4.02	0.18	49.94	18.03	-5.05	1.0742	0.0441	1.0078	0.3743	0.1413	0.0270	0.0071	-0.0120	0.000000
183.	17.	4.01	0.18	49.51	20.02	-5.05	1.1477	0.0482	1.0619	0.4381	0.1756	0.0242	0.0041	-0.0236	0.000000
184.	2.	4.03	0.18	50.26	-6.02	0.00	-0.0881	0.0091	-0.0867	0.0183	0.0039	-0.0001	0.0000	0.0010	0.00000
184.	3.	4.02	0.18	50.15	-4.96	0.00	-0.0468	0.0091	-0.0457	0.0148	0.0039	-0.0001	0.0000	0.0010 0.0006	0.000000
184.	4.	4.02	0.18	50.26	-3.97	0.00	-0.0110	0.0119	-0.0102	0.0126	0.0095	0.0000	0.0000	0.0002	0.000000
184.	5.	4.01	0.18	50.15	-2.98	0.00	0.0179	0.0129	0.0185	0.0120	0.0121	0.0000	-0.0001	-0.0002	0.000000
184.	6.	4.00	0.18	50.03	-2.00	0.00	0.0498	0.0140	0.0503	0.0122	0.0149	-0.0001	-0.0001	-0.0002	0.000000
184.	7.	4.00	0.18	49.92	-1.02	0.00	0.0793	0.0145	0.0795	0.0131	0.0165	-0.0003	-0.0002	0.0000	0.000000
184.	8.	4.00	0.18	50.15	-0.05	0.00	0.1080	0.0146	0.1080	0.0146	0.0176	-0.0003	-0.0002	-0.0005	0.000000
184.	9. 10	4.00	0.18	50.03	2.09	0.00	0.1829	0.0141	0.1822	0.0207	0.0210	-0.0005	-0.0002	-0.0002	0.000000
184. 184.	10. 11.	4.00 4.01	0.18 0.18	50.04 50.51	4.02 5.97	0.00 0.00	0.2629 0.3546	0.0127	0.2614	0.0311	0.0241	-0.0002	-0.0006	-0.0006	0.000000
184.	12.	3.98	0.18	49.71	8.00	0.00	0.3346	0.0161 0.0203	0.3510 0.4316	0.0529 0.0812	0.0346	-0.0002 -0.0009	-0.0007 -0.0010	0.0005 -0.0013	0.000000
184.	13.	3.99	0.18	49.96	9.99	0.00	0.5313	0.0234	0.5192	0.1153	0.0745	-0.0004	-0.0016	-0.0026	0.000000
184.	14.	3.98	0.18	49.86	11.96	0.00	0.6306	0.0267	0.6114	0.1569	0.0953	0.0006	-0.0031	-0.0061	0.000000
184.	15.	3.99	0.18	50.11	14.01	0.00	0.7386	0.0306	0.7092	0.2084	0.1190	0.0018	-0.0049	-0.0088	0.000000
184.	16.	3.98	0.18	50.02	16.00	0.00	0.8395	0.0339	0.7977	0.2640	0.1451	0.0048	-0.0071	-0.0120	0.000000
184.	17.	3.98	0.18	49.82	17.97	0.00	0.9458	0.0377	0.8880	0.3277	0.1723	0.0080	-0.0128	-0.0200	0.000000
184.	18.	3.96	0.18	49.51	20.06	0.00	1.0642	0.0420	0.9853	0.4045	0.2009	0.0100	-0.0168	-0.0260	0.000000
185.	1.	3.99	0.18	50.38	-6.03	5.01	-0.0955	0.0069	0.0042	0.0160	0.0000	0.0006	0.0040	0.0004	0.000000
185.	2.	3.99	0.18	50.38	-4.98	5.01	-0.0568	0.0086	-0.0942 -0.0559	0.0169 0.0135	-0.0002 0.0030	0.0026 0.0019	-0.0049 -0.0047	-0.0076	0.000000
185.	3.	3.98	0.18	50.15	-3.97	5.01	-0.0203	0.0000	-0.0196	0.0133	0.0060	0.0019	-0.0047	-0.0069 -0.0064	0.000000
185.	4.	3.97	0.18	50.03	-2.99	5.01	0.0114	0.0113	0.0120	0.0107	0.0086	-0.0003	-0.0046	-0.0065	0.000000
185.	5.	3.97	0.18	50.03	-2.03	5.01	0.0415	0.0124	0.0419	0.0109	0.0107	-0.0014	-0.0048	-0.0071	0.000000
185.	6.	3.97	0.18	50.03	-1.00	5.01	0.0756	0.0130	0.0758	0.0117	0.0130	-0.0023	-0.0050	-0.0081	0.000000
185.	7.	3.96	0.18	49.92	-0.08	5.01	0.1063	0.0133	0.1063	0.0131	0.0149	-0.0028	-0.0050	-0.0088	0.000000
185.	8.	3.96	0.18	49.92	1.96	5.01	0.1795	0.0134	0.1789	0.0195	0.0181	-0.0047	-0.0042	-0.0079	0.000000
185. 185	9. 10	3.96	0.18	50.04	4.03	5.01	0.2675	0.0149	0.2658	0.0336	0.0260	-0.0077	-0.0055	-0.0025	0.000000
185. 185.	10. 11.	3.96 3.97	0.18 0.18	50.05 50.40	6.04 8.05	5.01 5.01	0.3488 0.4348	0.0157 0.0181	0.3452 0.4280	0.0523 0.0788	0.0368	-0.0107	-0.0060	0.0008	0.000000
185.	12.	3.95	0.18	49.84	9.98	5.01	0.4348	0.0181	0.4280	0.0788	0.0516 0.0698	-0.0128 -0.0145	-0.0057 -0.0057	-0.0011 -0.0039	0.000000
185.	13.	3.95	0.18	49.86	12.01	5.01	0.6352	0.0254		0.1130	0.0899	-0.0145 -0.0156	-0.0037		0.000000
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NASA Langley Research Center	14- by 22-Foot Subsonic Tunnel	Test 391
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Řun	Point	R	М	q	α	β	C _N	C _A	C_L	C_D	C _m	G	$C_{\mathbf{n}}$	C _Y	$C_{\mathbf{q}}$
										0.0007	0.1407	0.0150	0.0106	0.0125	0.000000
185.	14.	3.95	0.18	49.88	14.04	5.01	0.7423	0.0294	0.7130	0.2086	0.1127 0.1351	-0.0159 -0.0163	-0.0106 -0.0154	-0.0125 -0.0198	0.000000
185.	15.	3.95	0.18	49.91	16.02	5.01	0.8484	0.0330 0.0370	0.8064 0.8996	0.2658 0.3313	0.1531	-0.0170	-0.0206	-0.0273	0.000000
185.	16.	3.95	0.18	49.93	18.01	5.01	0.9580	0.0413	0.9860	0.4028	0.1927	-0.0176	-0.0242	-0.0301	0.000000
185.	17.	3.94	0.18	49.62	20.00	5.01	1.0643	0.0413	0.9600	0.4020	0.172.	0.02.0			
186.	1.	3.94	0.18	49.80	-5.98	-5.01	-0.0909	0.0088	-0.0895	0.0182	-0.0008	-0.0006	0.0046	0.0085	0.000000
186.	2.	3.95	0.18	50.15	-4.98	-5.01	-0.0543	0.0102	-0.0532	0.0149	0.0025	-0.0001	0.0042	0.0084	0.000000
186.	3.	3.96	0.18	50.38	-3.97	-5.01	-0.0187	0.0117	-0.0178	0.0130	0.0062	0.0003	0.0040	0.0069	0.000000
186.	4.	3.96	0.18	50.38	-2.94	-5.01	0.0141	0.0129	0.0148	0.0121	0.0093	0.0013	0.0041	0.0067	0.000000
186.	5.	3.95	0.18	50.26	-2.02	-5.01	0.0435	0.0139	0.0439	0.0124	0.0118	0.0022	0.0042 0.0041	0.0065 0.0069	0.000000
186.	6.	3.95	0.18	50.26	-1.02	-5.01	0.0745	0.0145	0.0747	0.0132	0.0139	0.0030 0.0039	0.0039	0.0071	0.000000
186.	7.	3.95	0.18	50.38	0.03	-5.01	0.1088	0.0146	0.1088 0.1764	0.0146 0.0204	0.0155 0.0189	0.0059	0.0034	0.0063	0.000000
186.	8.	3.94	0.18	50.15	2.01	-5.01 -5.01	0.1770 0.2571	0.0142 0.0150	0.1764	0.0204	0.0241	0.0037	0.0044	0.0023	0.000000
186.	9. 10	3.95 3.94	0.18 0.18	50.38 50.16	4.00 5.99	-5.01 -5.01	0.2371	0.0150	0.2334	0.0523	0.0358	0.0109	0.0044	-0.0029	0.000000
186. 186.	10. 11.	3.94	0.18	50.17	7.99	-5.01	0.4346	0.0198	0.4276	0.0800	0.0513	0.0132	0.0037	-0.0016	0.000000
186.	12.	3.94	0.18	50.07	9.96	-5.01	0.5285	0.0237	0.5164	0.1148	0.0713	0.0142	0.0039	0.0002	0.000000
186.	13.	3.93	0.18	49.86	12.05	-5.01	0.6319	0.0276	0.6122	0.1589	0.0940	0.0156	0.0042	0.0019	0.000000
186.	14.	3.92	0.18	49.77	13.96	-5.01	0.7283	0.0309	0.6994	0.2056	0.1153	0.0189	0.0032	-0.0024	0.000000
186.	15.	3.93	0.18	49.91	15.95	-5.01	0.8394	0.0352	0.7973	0.2646	0.1404	0.0225	0.0021	-0.0082	0.000000
186.	16.	3.94	0.18	50.28	17.97	-5.01	0.9538	0.0391	0.8952	0.3315	0.1664	0.0274	-0.0023	-0.0196	0.000000
186.	17.	3.92	0.18	49.85	20.02	-5.02	1.0522	0.0431	0.9739	0.4006	0.1992	0.0275	-0.0020	-0.0230	0.000000
107	2.	3.95	0.18	50.03	-2.00	0.05	0.0481	0.0147	0.0486	0.0130	0.0148	0.0000	-0.0001	-0.0005	0.000000
187. 187.	3.	3.94	0.18	49.92	0.00	0.05	0.1097	0.0152	0.1097	0.0152	0.0177	-0.0003	-0.0002	-0.0007	0.000000
187.	4.	3.94	0.18	50.03	2.07	0.05	0.1806	0.0145	0.1800	0.0210	0.0207	-0.0004	-0.0001	-0.0005	0.000000
187.	5.	3.95	0.18	50.26	3.02	0.05	0.2148	0.0137	0.2138	0.0249	0.0222	-0.0006	-0.0002	-0.0010	0.000000
187.	6.	3.95	0.18	50.27	4.01	0.05	0.2532	0.0126	0.2517	0.0303	0.0238	-0.0004	-0.0003	-0.0013	0.000000
187.	7.	3.94	0.18	50.15	4.53	0.05	0.2750	0.0122	0.2732	0.0339	0.0250	-0.0006	-0.0004	-0.0017	0.000000
187.	8.	3.94	0.18	50.27	5.01	0.05	0.2971	0.0124	0.2949	0.0383	0.0261	-0.0003	-0.0003	-0.0018	0.000000
187.	9.	3.94	0.18	50.16	5.53	0.05	0.3258	0.0135	0.3229	0.0448	0.0274	0.0001	-0.0005 -0.0005	-0.0018 -0.0026	0.000000
187.	10.	3.94	0.18	50.16	6.03	0.05	0.3492	0.0146	0.3458	0.0512 0.0655	0.0310 0.0444	0.0002 -0.0010	-0.0005	-0.0020	0.000000
187.	11.	3.94	0.18	50.28	7.00	0.05	0.3921	0.0178 0.0197	0.3871 0.4288	0.0803	0.0537	-0.0010	-0.0008	-0.0006	0.000000
187.	12.	3.92	0.18	49.94 49.95	8.02 9.05	0.05 0.05	0.4359 0.4847	0.0137	0.4752	0.0979	0.0653	-0.0006	-0.0011	-0.0030	0.000000
187.	13. 14.	3.92 3.93	0.18 0.18	50.30	9.03 9. 98	0.05	0.5282	0.0235	0.5162	0.1147	0.0743	-0.0001	-0.0016	-0.0034	0.000000
187. 187.	15.	3.93	0.18	50.21	12.02	0.05	0.6294	0.0269	0.6100	0.1573	0.0953	0.0008	-0.0032	-0.0068	0.000000
187.	16.	3.91	0.18	49.79	16.01	0.05	0.8385	0.0341	0.7965	0.2640	0.1444	0.0047	-0.0070	-0.0124	0.000000
187.	17.	3.91	0.18	49.85	20.03	0.05	1.0604	0.0426	0.9817	0.4032	0.2005	0.0097	-0.0160	-0.0246	0.000000
		3.00	Λ 10	49.69	-2.03	5.01	0.0430	0.0130	0.0434	0.0114	0.0109	-0.0015	-0.0049	-0.0076	0.000000
188.	1.	3.90	0.18				0.1114	0.0136	0.1114	0.0137	0.0152	-0.0030	-0.0049	-0.0095	0.000000
188.	2.	3.90 3.91	0.18 0.18	49. 69 49.92	0.06 2.05	5.01 5.01	0.1811	0.0133	0.1806	0.0197	0.0181	-0.0049	-0.0042	-0.0088	0.000000
188. 188.	3. 4.	3.91	0.18	50.15	3.04	5.01	0.2239	0.0137	0.2229	0.0256	0.0203	-0.0055	-0.0050	-0.0073	0.000000
188.	5.	3.91	0.18	50.27	4.04	5.01	0.2646	0.0146	0.2629	0.0332	0.0253	-0.0075	-0.0055	-0.0034	0.000000
188.	6.	3.91	0.18	50.15	4.50	5.01	0.2832	0.0148	0.2812	0.0370	0.0275	-0.0086	-0.0056	-0.0021	0.000000
188.	7.	3.91	0.18	50.16	5.02	5.01	0.3045	0.0148	0.3021	0.0414	0.0302	-0.0097	-0.0059	-0.0008	0.000000
188.	8.	3.92	0.18	50.39	5.54	5.01	0.3251	0.0148	0.3222	0.0462	0.0334	-0.0102	-0.0061	0.0005	0.000000
188.	9.	3.91	0.18	50.27	6.02	5.01	0.3437	0.0148	0.3403	0.0508	0.0365	-0.0107	-0.0064	0.0013	0.000000
188.	10.	3.91	0.18	50.28	7.00	5.01	0.3879	0.0154	0.3831	0.0625	0.0409	-0.0129	-0.0064	0.0025 0.0007	0.000000
188.	11.	3.91	0.18	50.40	8.00	5.01	0.4320	0.0170	0.4254	0.0769	0.0485	-0.0140 -0.0141	-0.0058 -0.0056	-0.0020	0.000000
188.	12.	3.89	0.18	49.95	9.02	5.01	0.4807	0.0190	0.4718	0.0941	0.0595 0.0692	-0.0141	-0.0056	-0.0020	0.000000
188.	13.	3.89	0.18	49.96	10.03	5.01	0.5308 0.6271	0.0210 0.0244	0.5190 0.6082	0.1131 0.1546	0.0692	-0.0143	-0.0071	-0.0069	0.000000
188.	14.	3.88	0.18	49.74	12.03	5.01	0.8446	0.0244	0.8027	0.2649	0.1355	-0.0165	-0.0152	-0.0201	0.000000
188.	15.	3.90	0.18	50.14 49.51	16.01 20.02	5.01 5.01	1.0669	0.0332	0.9880	0.4046	0.1941	-0.0174	-0.0240	-0.0301	0.000000
188.	16.	3.87	0.18	47.71	20.02										0.000000
189.	1.	3.88	0.18	49.80	-1.99	-5.01	0.0413	0.0135	0.0417	0.0120	0.0121	0.0020	0.0041	0.0096 0.0096	0.000000
189.	2.	3.88	0.18	49.80	0.02	-5.01	0.1060	0.0143	0.1060	0.0143	0.015 8 0.01 88	0.0038 0.0057	0.0040	0.0096	0.000000
189.	3.	3.89	0.18	50.03	1.99	-5.01	0.1734	0.0139	0.1728	0.0199	0.0205	0.0057	0.0039	0.0075	0.000000
189.		3.89	0.18	50.15	3.03	-5.01	0.2148	0.0136	0.2138 0.2566	0.0249	0.0246	0.0003	0.0039	0.0073	0.000000
189.		3.90	0.18	50.38	4.07	-5.01 -5.01	0.2583 0.2749	0.0143 0.0145	0.2729	0.0360	0.0240	0.0086	0.0046	0.0040	0.000000
189.		3.88	0.18	50.04 50.27	4.49 5.01	-5.01	0.2749	0.0149	0.2930	0.0407	0.0298	0.0096	0.0047	0.0021	0.000000
189.		3.89 3.89		50.27	5.55	-5.01	0.3172	0.0150	0.3142	0.0456	0.0338	0.0101	0.0048	0.0011	0.000000
189.	ō.	3.07	0.10	20.27	3.33										

NASA Langley Research Center	14- by 22-Foot Subsonic Tunnel	Test 391
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Run	Point	R	M	q	α	β	C _N	C _A	$\mathbf{c}_{\mathtt{L}}$	C_{D}	C _m	q	C _E	$\mathbf{C}_{\mathbf{Y}}$	C_q
						.*.	ā.				71 P	-			
		2 00	0.18	50.16	5.99	-5.01	0.3336	0.0145	0.3303	0.0492	0.0360	0.0108	0.0047	0.0022	0.000000
189.	9.	3.89		49.82	7.03	-5.01	0.3816	0.0149	0.3769	0.0615	0.0414	0.0133	0.0045	0.0010	0.000000
189.	10.	3.87	0.18	50.17	8.00	-5.01	0.4310	0.0172	0.4244	0.0770	0.0477	0.0155	0.0040	-0.0003	0.000000
189.	11.	3.88	0.18		9.04	-5.01	0.4773	0.0193	0.4684	0.0941	0.0586	0.0149	0.0040	-0.0011	0.000000
189.	12.	3.87	0.18	49.83 49.84	10.02	-5.01	0.5270	0.0213	0.5152	0.1126	0.0682	0.0150	0.0038	0.0008	0.000000
189.	13.	3.87	0.18	50.21	12.04	-5.01	0.6308	0.0270	0.6113	0.1580	0.0917	0.0155	0.0046	0.0018	0.000000
189.	14.	3.88	0.18	50.14	16.00	-5.01	0.8383	0.0345	0.7963	0.2643	0.1397	0.0244	-0.0002	-0.0134	0.000000
189.	15.	3.88	0.18	49.96	20.04	-5.01	1.0197	0.0421	0.9435	0.3889	0.1998	0.0255	-0.0061	-0.0283	0.000000
189.	16.	3.87	0.18	49.90	20.04	-5.01	1.0177	0.0121	012 100						
100	2.	3.90	0.18	49.92	-2.02	-0.01	0.0473	0.0142	0.0478	0.0126	0.0147	0.0000	-0.0001	-0.0004	0.000000
190.	2. 3.	3.89	0.18	49.92	-0.06	-0.01	0.1073	0.0149	0.1073	0.0147	0.0176	-0.0003	-0.0002	-0.0009	0.000000
190.		3.90	0.18	50.26	2.00	-0.01	0.1777	0.0141	0.1771	0.0203	0.0208	-0.0004	-0.0001	-0.0007	0.000000
190.	4. 5.	3.90	0.18	50.38	3.06	-0.01	0.2174	0.0133	0.2164	0.0249	0.0224	-0.0004	-0.0001	-0.0007	0.000000
190.	5. 6.	3.88	0.18	49.92	4.04	-0.01	0.2558	0.0124	0.2543	0.0304	0.0241	-0.0004	-0.0002	-0.0009	0.000000
190.	7.	3.88	0.18	49.92	4.51	-0.01	0.2750	0.0120	0.2732	0.0336	0.0250	-0.0007	-0.0002	-0.0010	0.000000
190.	7. 8.	3.89	0.18	50.15	5.02	-0.01	0.2993	0.0123	0.2971	0.0384	0.0260	-0.0002	-0.0002	-0.0010	0.000000
190.	o. 9.	3.90	0.18	50.39	5.51	-0.01	0.3254	0.0134	0.3226	0.0446	0.0274	0.0000	-0.0002	-0.0011	0.000000
190.	9. 10.	3.89	0.18	50.27	6.03	-0.01	0.3486	0.0146	0.3452	0.0511	0.0313	0.0001	-0.0003	-0.0014	0.000000
190. 190.	10. 11.	3.90	0.18	50.40	7.05	-0.01	0.3931	0.0179	0.3880	0.0660	0.0450	-0.0013	-0.0001	0.0003	0.000000
190.	12.	3.89	0.18	50.17	7.99	-0.01	0.4360	0.0195	0.4291	0.0800	0.0533	-0.0014	-0.0001	0.0007	0.000000
190.	13.	3.90	0.18	50.41	9.01	-0.01	0.4830	0.0219	0.4736	0.0973	0.0644	-0.0011	-0.0002	-0.0009	0.000000
190.	14.	3.88	0.18	49.96	10.00	-0.01	0.5304	0.0236	0.5183	0.1153	0.0746	-0.0013	-0.0001	-0.0012	0.000000
190.	15.	3.88	0.18	49.98	12.05	-0.01	0.6307	0.0269	0.6112	0.1579	0.0950	-0.0007	-0.0012	-0.0033	0.000000
	15. 16.	3.88	0.18	50.02	16.01	-0.01	0.8382	0.0341	0.7963	0.2640	0.1411	-0.0005	-0.0027	-0.0059	0.000000
190.	17.	3.86	0.18	49.62	20.02	-0.01	1.0670	0.0429	0.9879	0.4055	0.1975	0.0012	-0.0074	-0.0141	0.000000
190.	17.	3.60	0.10	47.02	20.02	0.0.	•								
101	2.	3.94	0.18	50.26	-2.00	-0.01	0.0481	0.0146	0.0486	0.0129	0.0148	0.0000	-0.0001	-0.0003	0.000000
191. 191.	2. 3.	3.91	0.18	49.80	-0.06	-0.01	0.1072	0.0153	0.1072	0.0152	0.0176	-0.0002	-0.0002	-0.0008	0.000000
191.	J. 4.	3.92	0.18	50.26	2.05	-0.01	0.1793	0.0147	0.1786	0.0211	0.0209	-0.0004	-0.0001	-0.0003	0.000000
191.	4. 5.	3.91	0.18	50.04	3.04	-0.01	0.2160	0.0138	0.2149	0.0253	0.0222	-0.0004	-0.0002	-0.0008	0.000000
191.	5. 6.	3.90	0.18	50.04	3.99	-0.01	0.2518	0.0128	0.2503	0.0303	0.0239	-0.0003	-0.0002	-0.0012	0.000000
191.	7.	3.90	0.18	50.15	4.50	-0.01	0.2736	0.0125	0.2717	0.0339	0.0246	-0.0007	-0.0003	-0.0010	0.000000
191.	8.	3.90	0.18	50.04	5.03	-0.01	0.2988	0.0127	0.2965	0.0389	0.0260	-0.0003	-0.0002	-0.0012	0.000000
191.	9.	3.90	0.18	50.16	5.49	-0.01	0.3234	0.0138	0.3206	0.0447	0.0272	0.0001	-0.0001	-0.0014	0.000000
191.	10.	3.89	0.18	50.05	6.00	-0.01	0.3476	0.0150	0.3441	0.0513	0.0310	0.0001	-0.0002	-0.0013	0.000000
191.	11.	3.89	0.18	50.05	7.01	-0.01	0.3930	0.0183	0.3878	0.0661	0.0443	-0.0011	0.0001	0.0002	0.000000
191.	12.	3.89	0.18	50.06	8.06	-0.01	0.4355	0.0200	0.4284	0.0809	0.0534	-0.0014	0.0002	0.0011	0.000000
191.	13.	3.91	0.18	50.53	9.03	-0.01	0.4813	0.0222	0.4719	0.0975	0.0643	-0.0013	0.0001	-0.0005	0.000000
191.	14.	3.88	0.18	49.96	10.05	-0.01	0.5342	0.0242	0.5217	0.1171	0.0746	-0.0013	0.0003	-0.0006	0.000000
191.	15.	3.88	0.18	49.98	12.00	-0.01	0.6274	0.0274	0.6080	0.1572	0.0946	-0.0019	0.0006	-0.0011	0.000000
191.	16.	3.89	0.18	50.02	16.05	-0.01	0.8412	0.0351	0.7987	0.2663	0.1432	-0.0014	-0.0003	-0.0019	0.000000
191.		3.89		50.20	20.01	-0.01	1.0598	0.0431	0.9811	0.4031	0.1994	0.0092	-0.0157	-0.0244	0.000000
171.	17.	5.05	0.10	50.20			-								

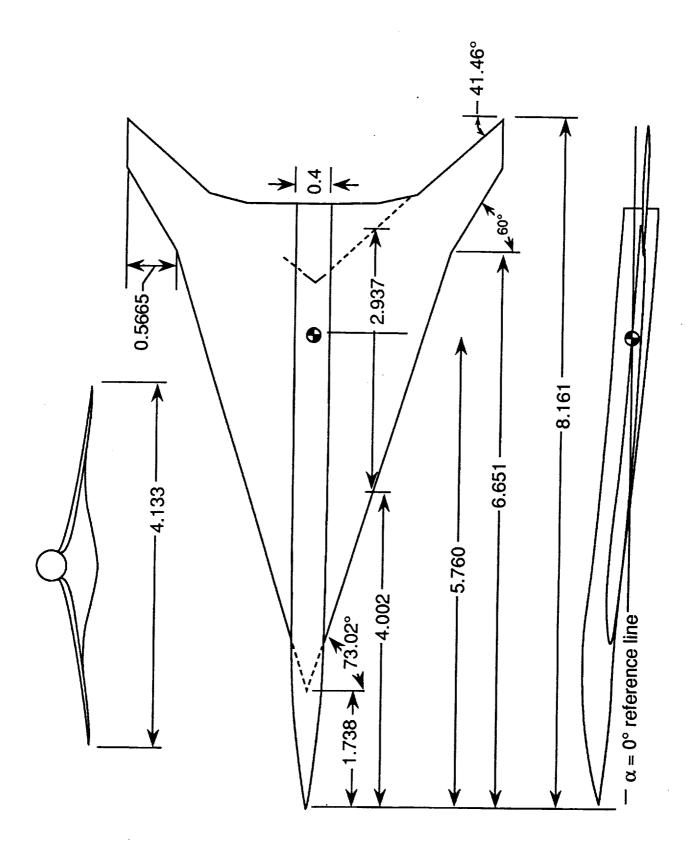
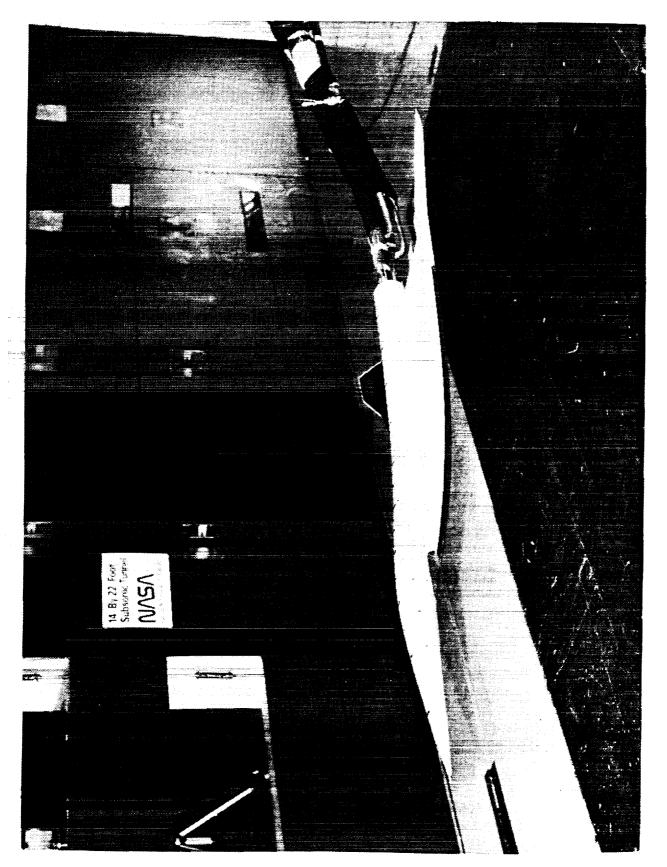


Figure 1. Geometric description of wind tunnel model.

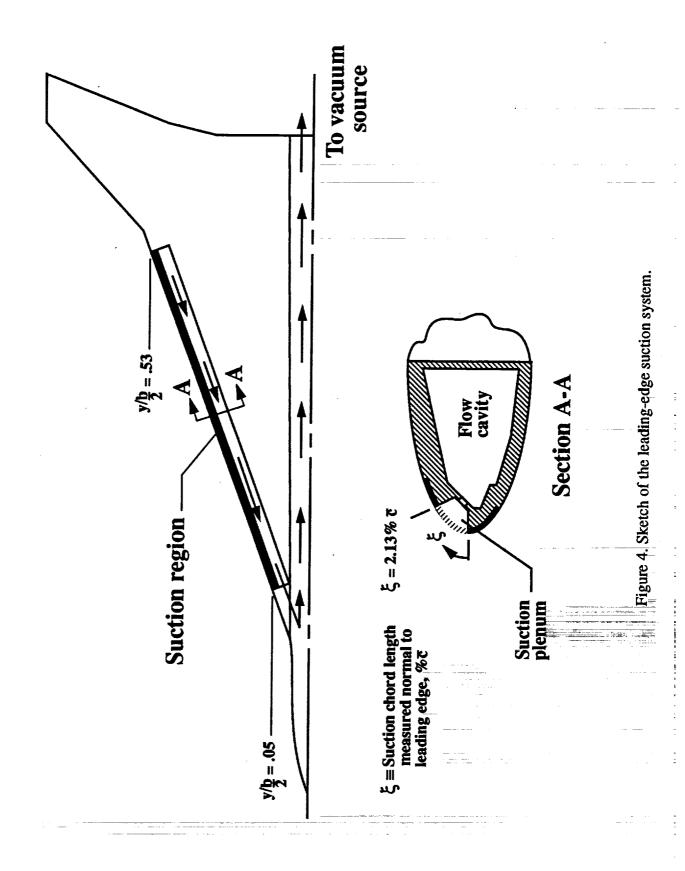


(a) Skewed view.

Figure 2. Photograph of model mounted in the 14- by 22-Foot Subsonic Tunnel.



Figure 3. Photograph of the segmented, partial span trailing-edge flap system.



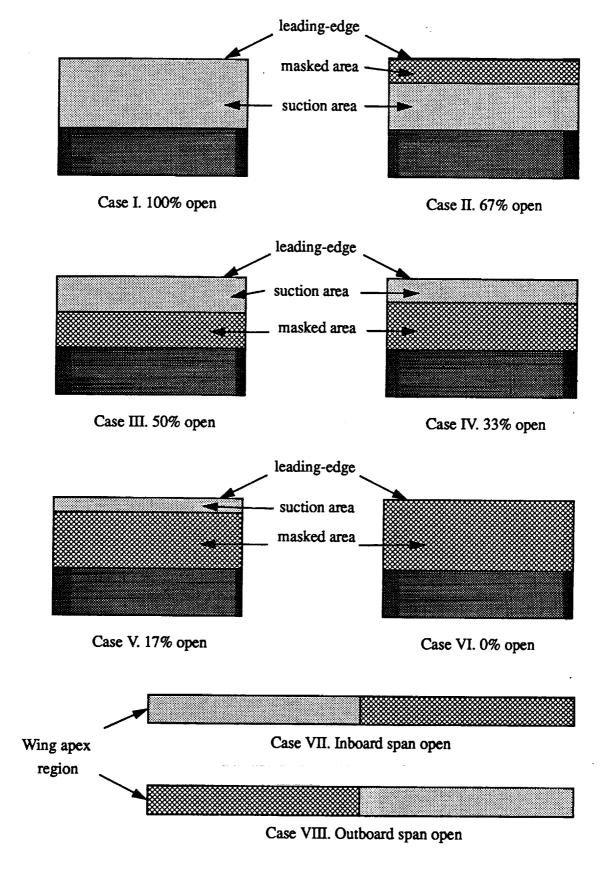
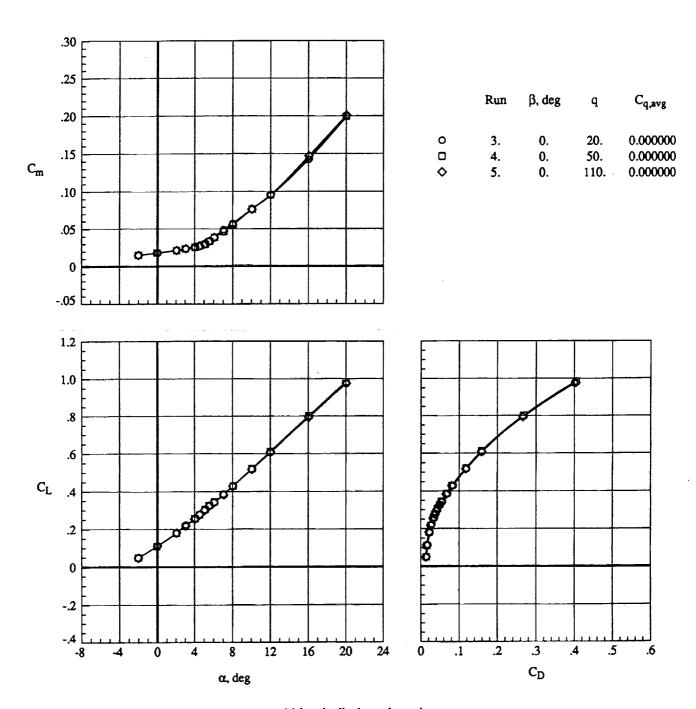
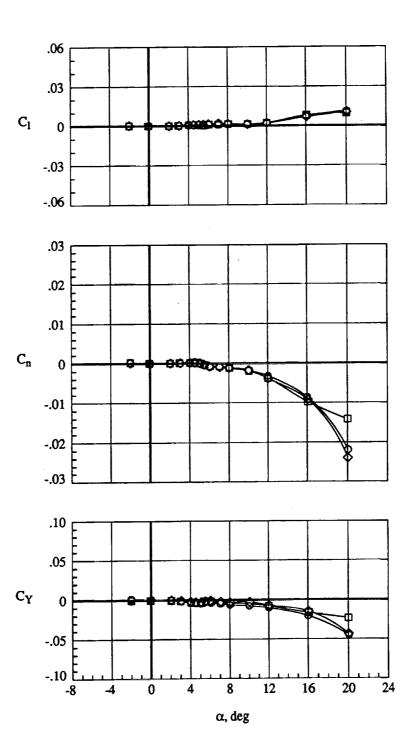


Figure 5. Sketch of masking scheme used to vary the local leading-edge suction.

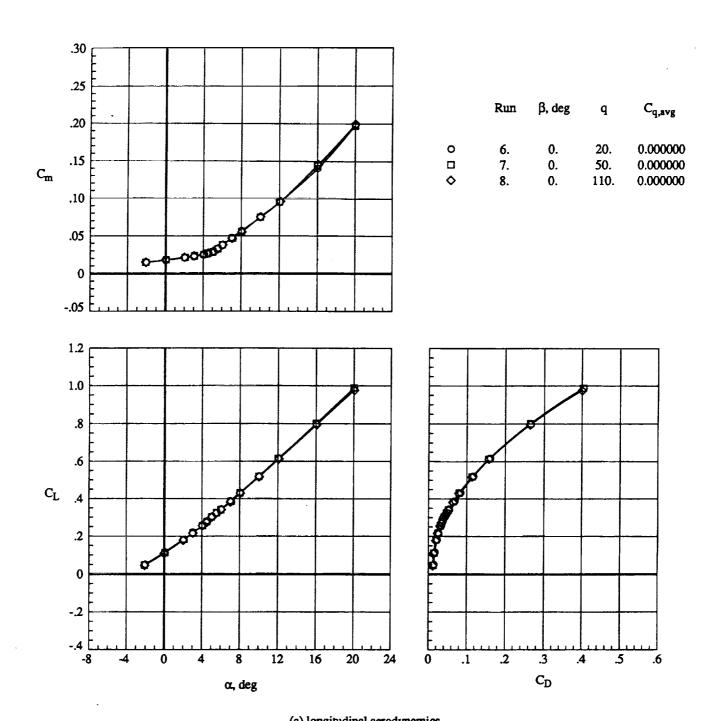


(a) longitudinal aerodynamics Figure 6. Case VI, Vacuum line connected to left wing only. δ_L = 0°, δ_T = 0°.

	Run	β, deg	q	C _{q,avg}
0	3.	0.	20.	0.000000
	4.	0.	50.	0.000000
\	5.	0.	110.	0.000000

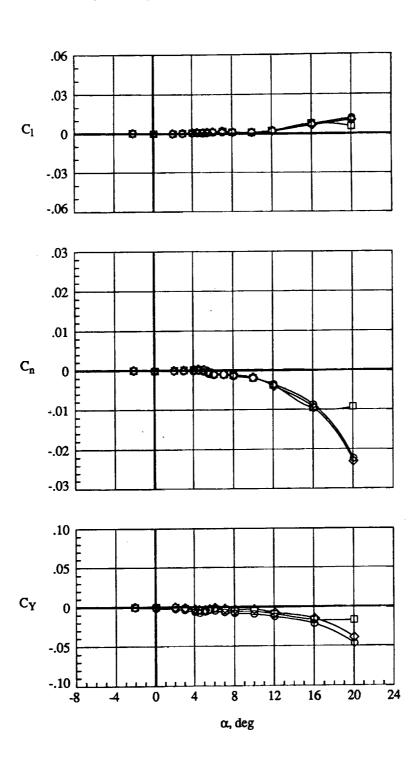


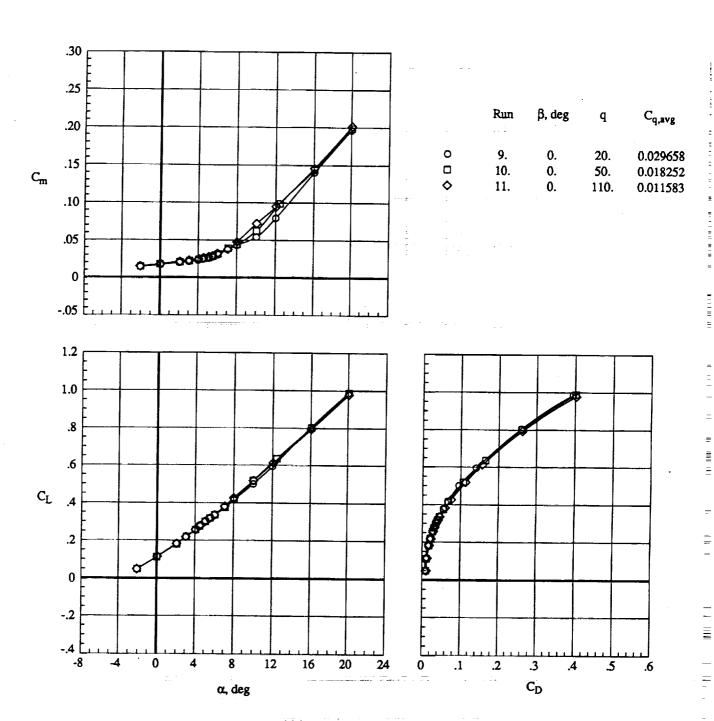
(b) Lateral aerodynamics Figure 6. Concluded.



(a) longitudinal aerodynamics Figure 7. Case VI, Vacuum line disconnected from both wings. δ_L = 0°, δ_T = 0°.

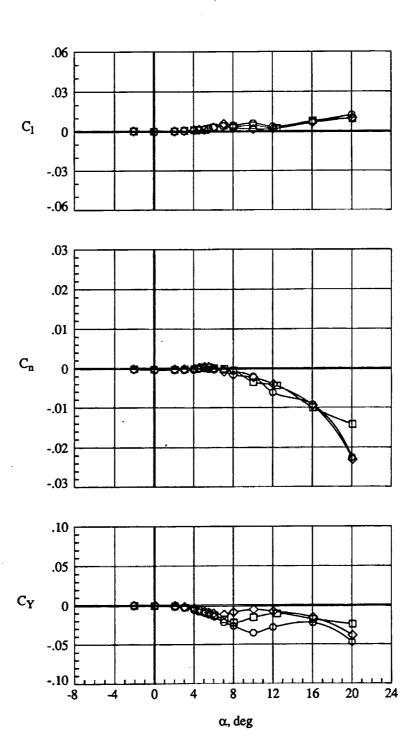
	Run	β, deg	q	$C_{q,avg}$
0	6.	0.	20.	0.000000
	7.	0.	50.	0.000000
\rightarrow	8.	0.	110.	0.000000

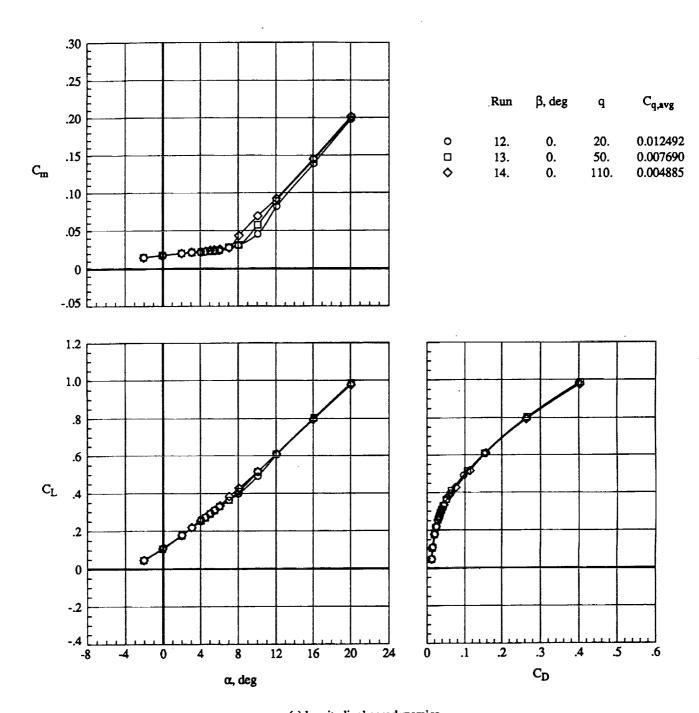




(a) longitudinal aerodynamics Figure 8. Case I, Suction on left wing only. Right wing is fully taped over. $\delta_L=0^\circ,\,\delta_T=0^\circ.$

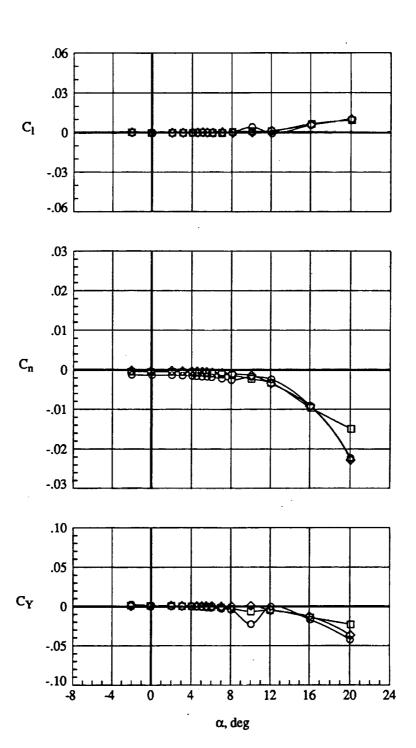
	Kun	p, aeg	q	Cq,avg
0	9.	0.	20.	0.029658
	10.	0.	50.	0.018252
\Diamond	11.	0.	110.	0.011583

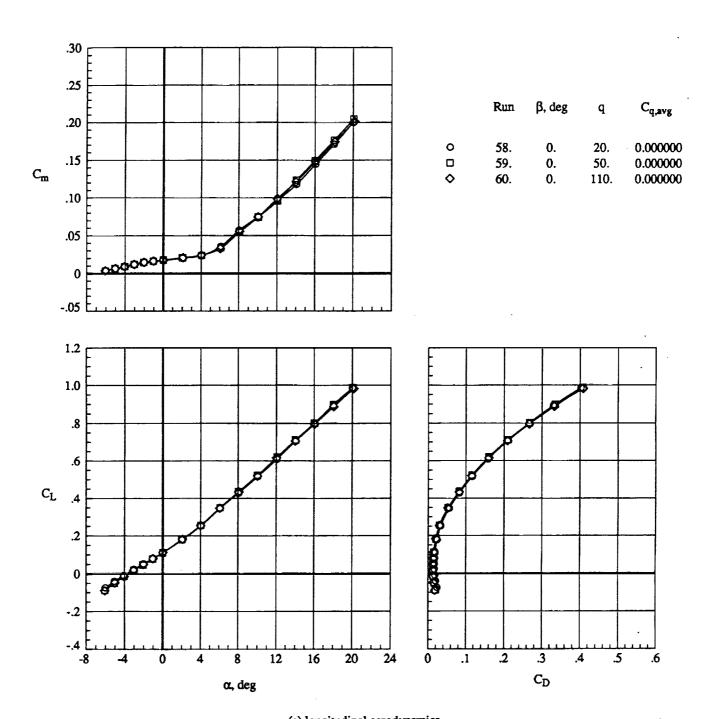




(a) longitudinal aerodynamics Figure 9. Case I, Suction on both wings. $\delta_L=0^\circ,\,\delta_T=0^\circ.$

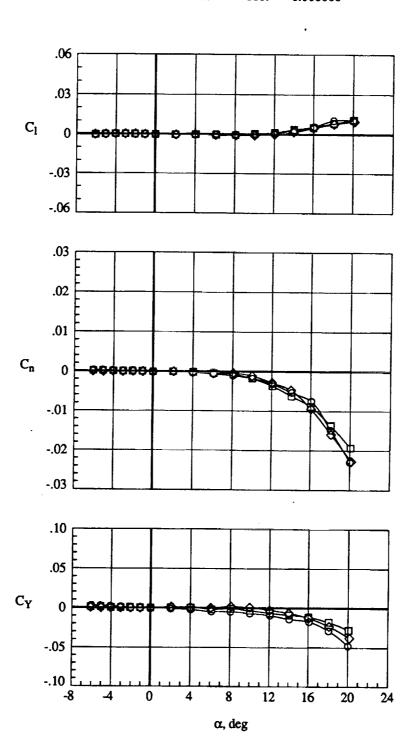
	Run	þ, deg	q	C _{q,avg}
0	12.	0.	20.	0.012492
	13.	0.	50.	0.007690
\Diamond	14.	0.	110.	0.004885

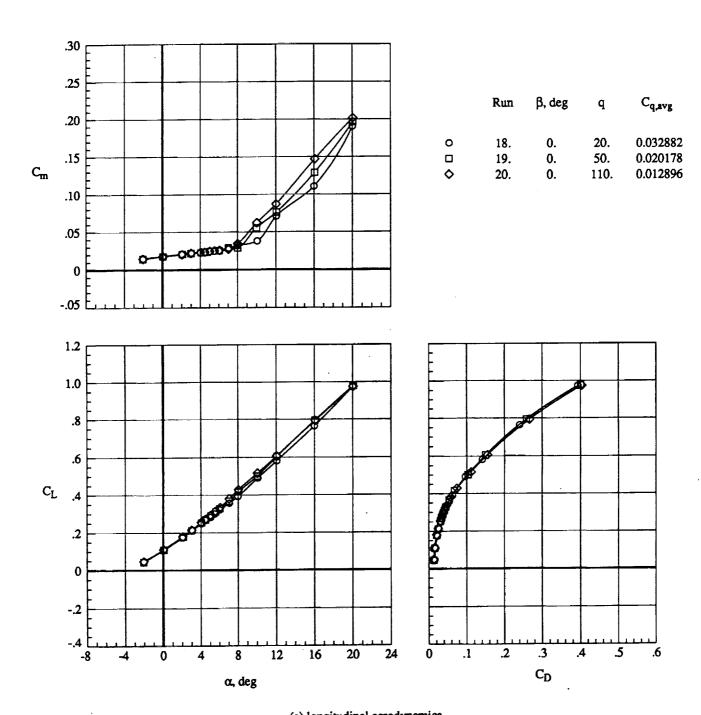




(a) longitudinal aerodynamics Figure 10. Case VI, Effect of tunnel dynamic pressure. δ_L = 0°, δ_T = 0°.

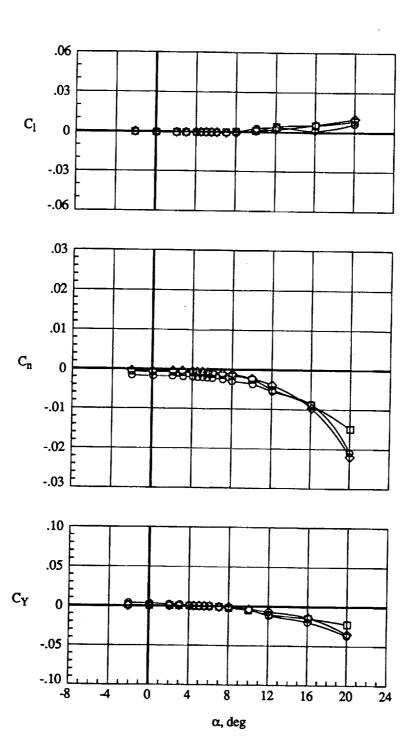
	Run	β, deg	q	C _{q,avg}	
0	58.	0.	20.	0.000000	
	59.	0.	50.	0.000000	
\Diamond	60.	0.	110.	0.000000	

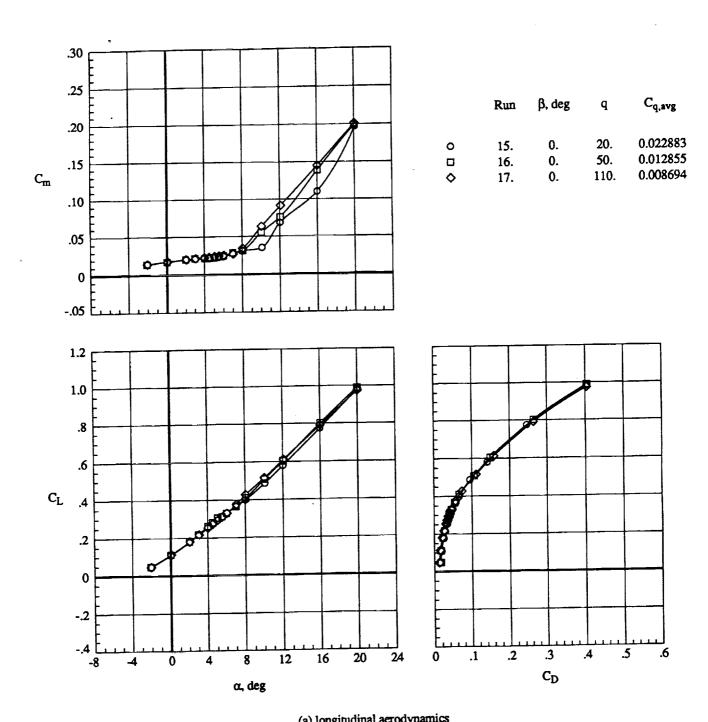




(a) longitudinal aerodynamics Figure 11. Case IV, Effect of tunnel dynamic pressure with suction. $\delta_L=0^\circ$, $\delta_T=0^\circ$.

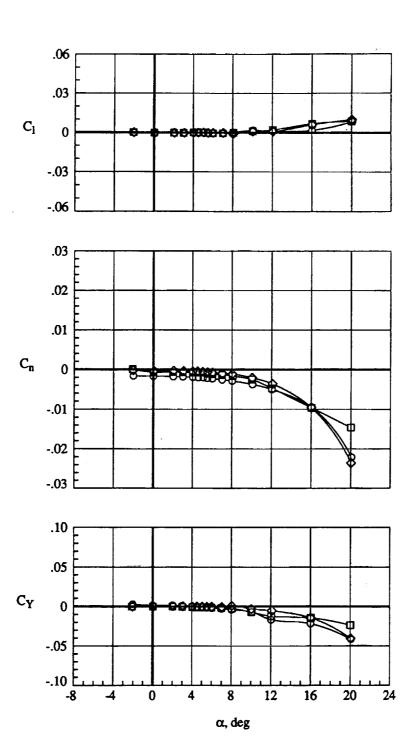
•	Run	β, deg	q	Cq,avg	
0	18.	0.	20.	0.032882	
	19.	0.	50.	0.020178	
\Q	20.	0.	110.	0.012896	

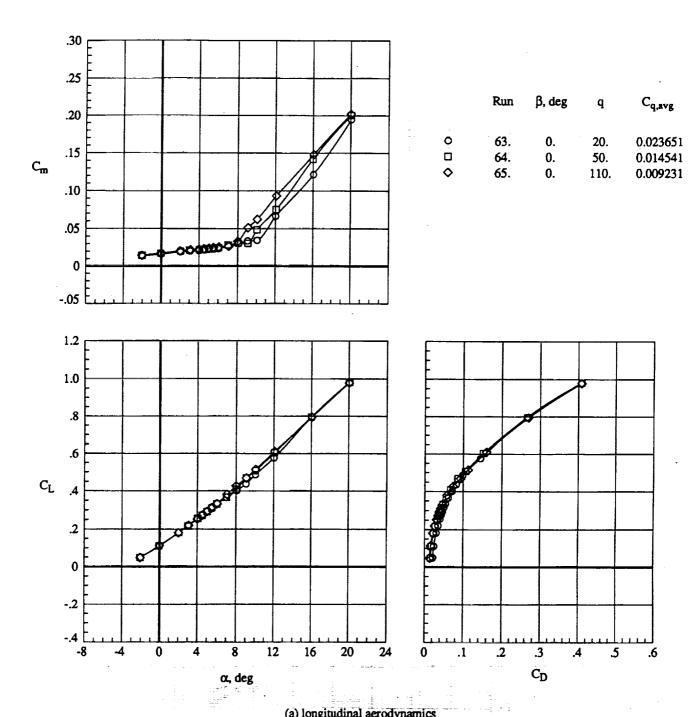




(a) longitudinal aerodynamics Figure 12. Case III, Effect of tunnel dynamic pressure with suction. $\delta_L=0^\circ,\,\delta_T=0^\circ.$

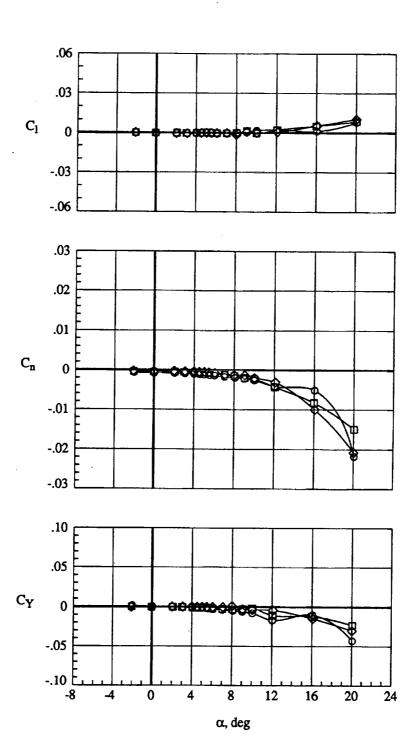
	Run	β, deg	. q	C _{q,avg}
0	15.	0.	20.	0.022883
	16.	0.	<i>5</i> 0.	0.012855
\Diamond	17.	0.	110.	0.008694

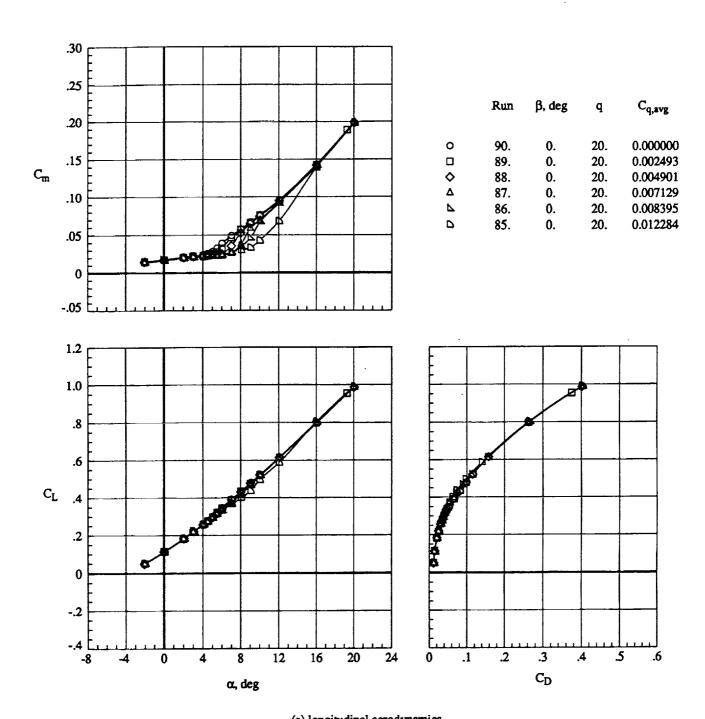




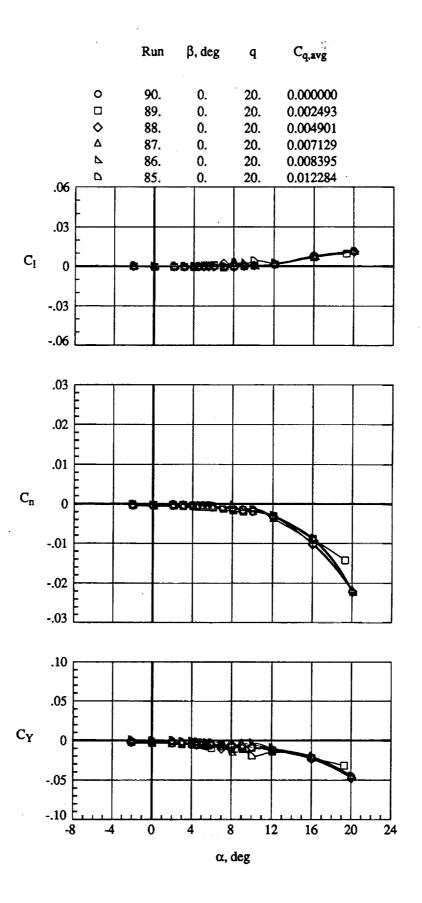
(a) longitudinal aerodynamics Figure 13. Case III, Effect of tunnel dynamic pressure with suction. $\delta_L=0^\circ$, $\delta_T=0^\circ$.

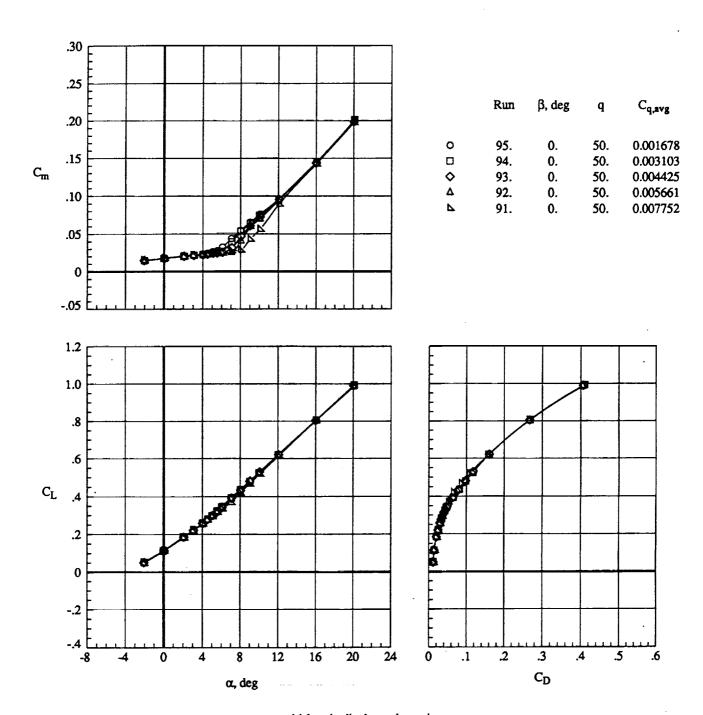
	Run	β, deg	q	C _{q,avg}	
0	63.	0.	20.	0.023651	
	64.	0.	50.	0.014541	
\Diamond	65.	0.	110.	0.009231	



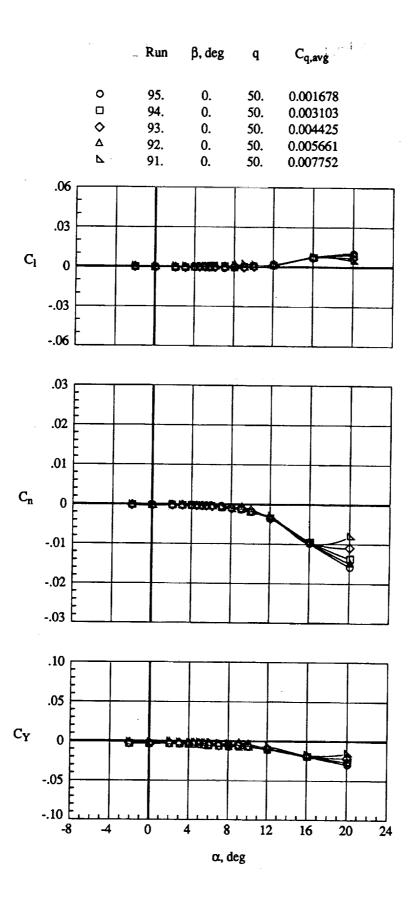


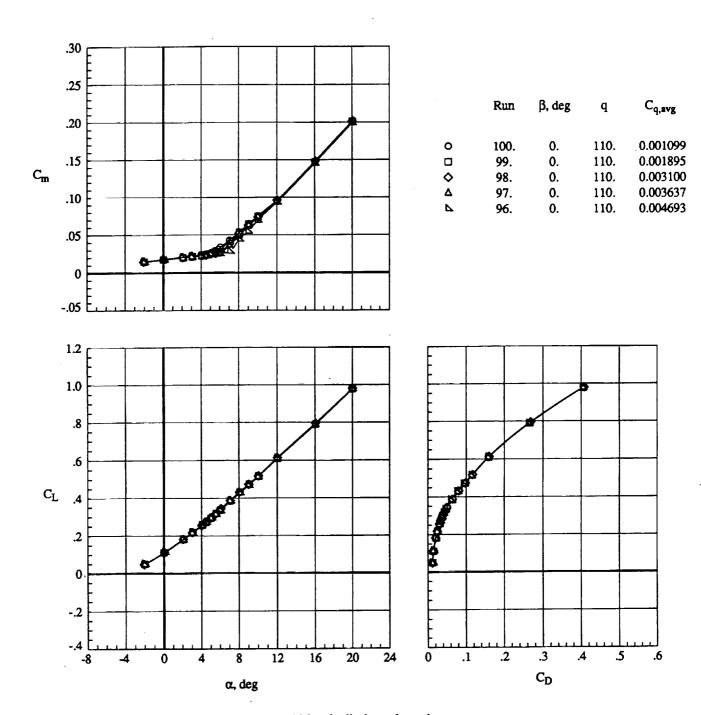
(a) longitudinal aerodynamics Figure 14. Case I, Effect of suction at q = 20 psf. δ_L = 0°, δ_T = 0°.



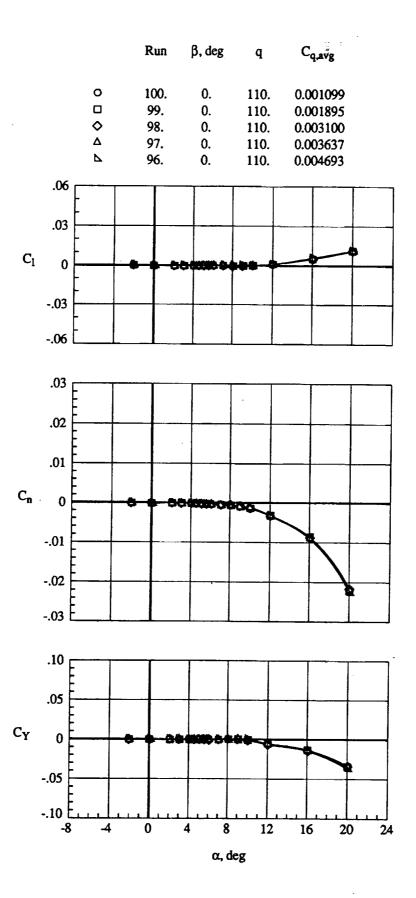


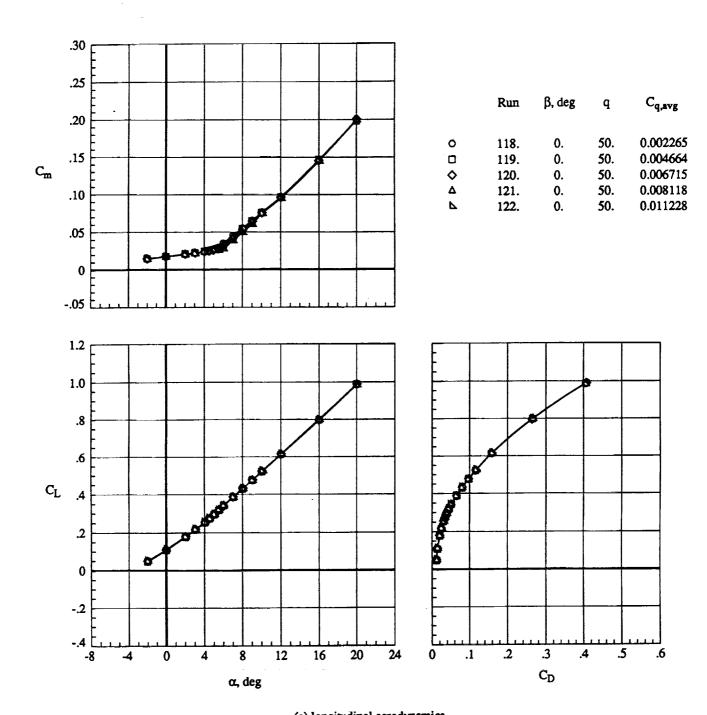
(a) longitudinal aerodynamics Figure 15. Case I, Effect of suction at q = 50 psf. δ_L = 0°, δ_T = 0°.



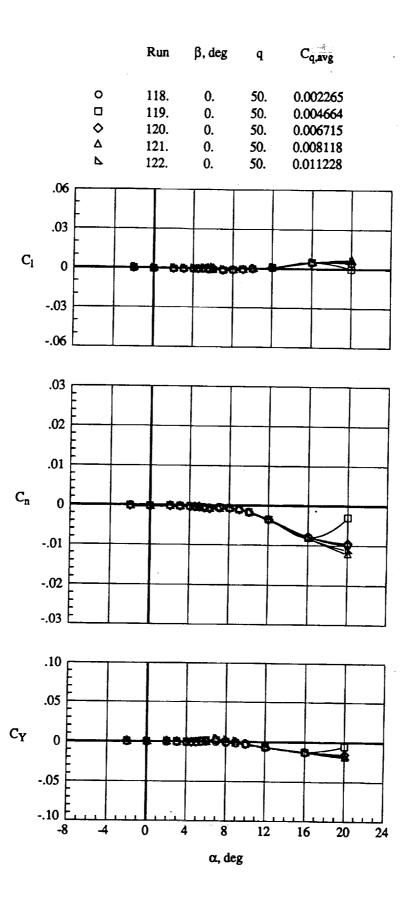


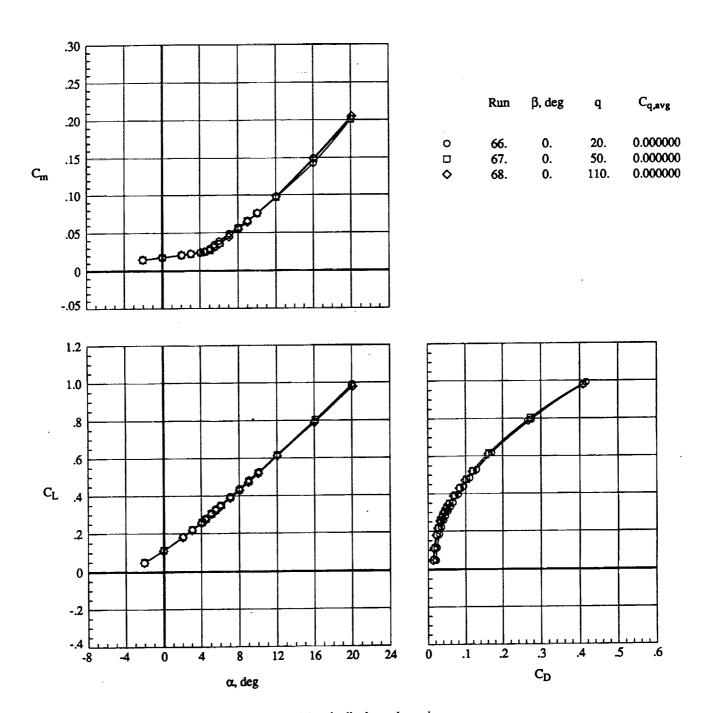
(a) longitudinal aerodynamics Figure 16. Case I, Effect of suction at q=110 psf. $\delta_L=0^\circ,\,\delta_T=0^\circ.$





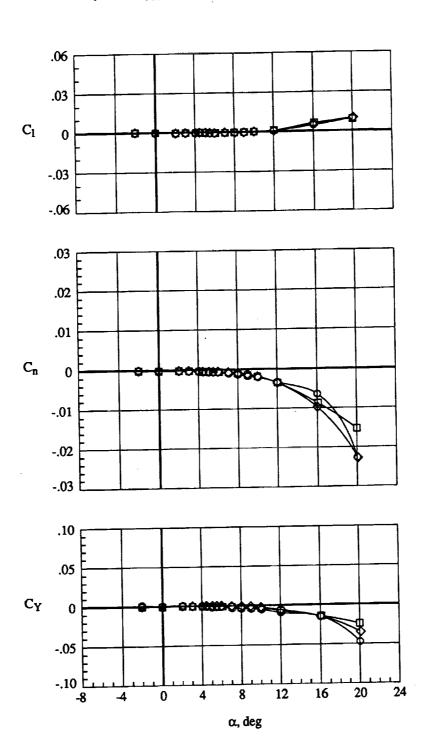
(a) longitudinal aerodynamics Figure 17. Case II, Effect of suction at q=50 psf. $\,\delta_L=0^\circ,\,\delta_T=0^\circ.$

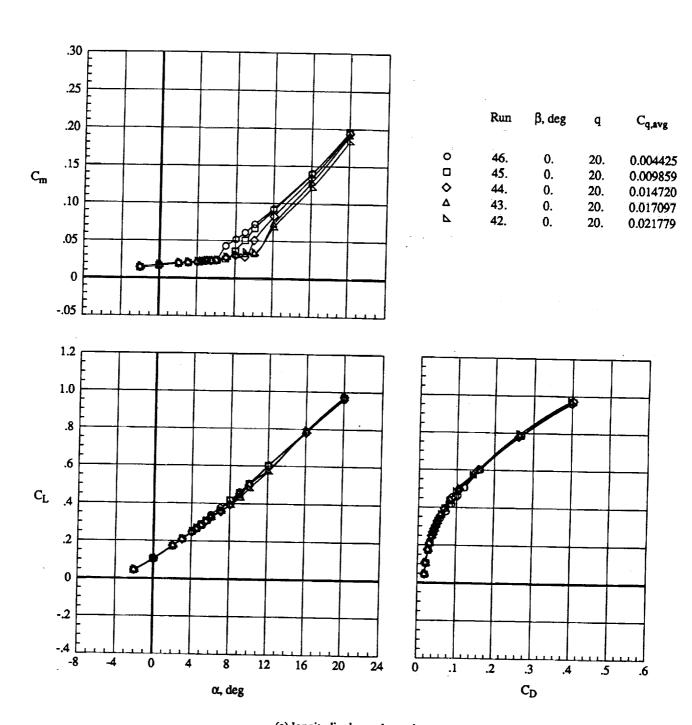




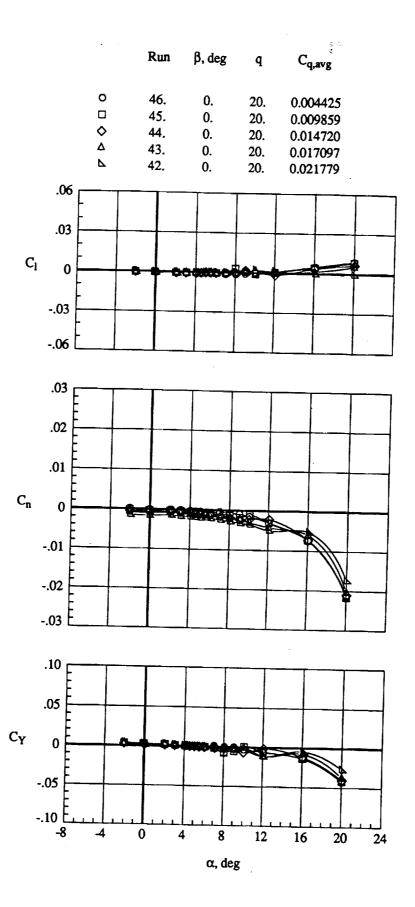
(a) longitudinal aerodynamics Figure 18. Case III, Effect of air recirculation through porous leading edge as a function of tunnel q. $\delta_L = 0^{\circ}$, $\delta_T = 0^{\circ}$.

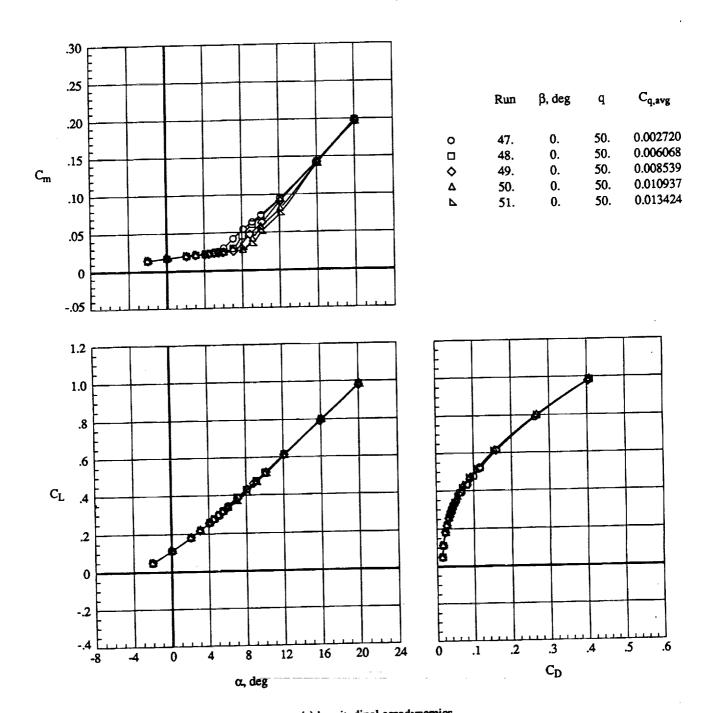
	Run	β, deg	q	$C_{q,avg}$
0	66.	0.	20.	0.000000
	67.	0.	50.	0.000000
\rightarrow	68.	0.	110.	0.000000



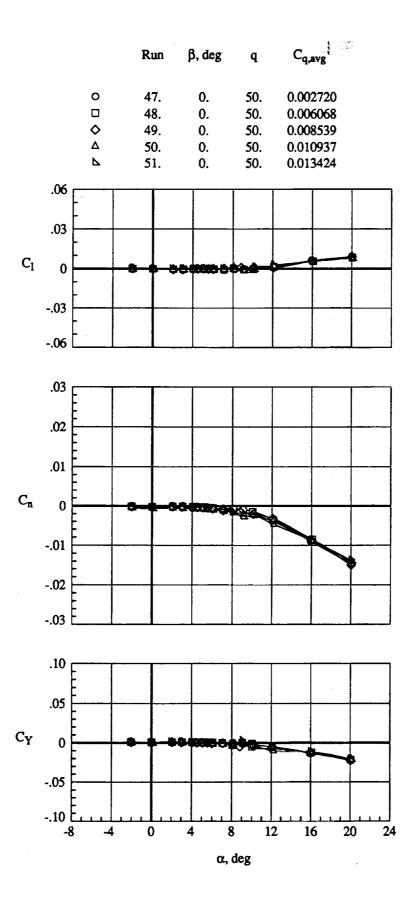


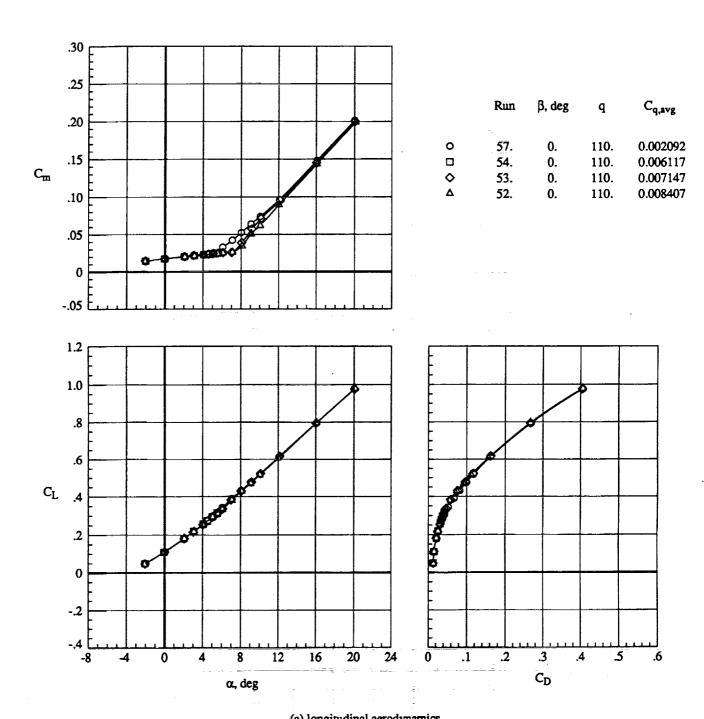
(a) longitudinal aerodynamics Figure 19. Case III, Effect of suction at q=20, psf. $\delta_L=0^\circ,$ $\delta_T=0^\circ.$





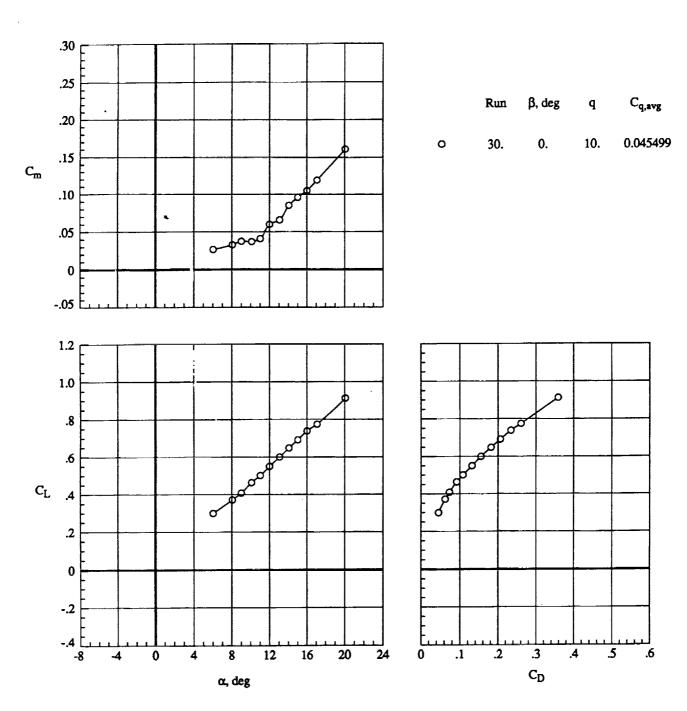
(a) longitudinal aerodynamics Figure 20. Case III, Effect of suction at q=50, psf. $\delta_L=0^\circ,$ $\delta_T=0^\circ.$





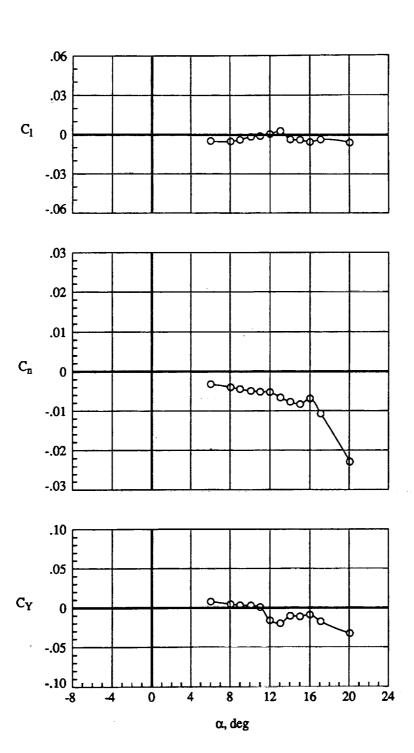
(a) longitudinal aerodynamics Figure 21. Case III, Effect of suction at q=110, psf. $\,\delta_L=0^\circ,\,\delta_T=0^\circ.$

			Run	β, deg	q	$C_{q,avg}$	
		ο 	57. 54. 53. 52.	0. 0. 0. 0.	110. 110. 110. 110.	0.002092 0.006117 0.007147 0.008407	
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	.03						
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	03						
	06						
	.03			<u> </u>	T. 1		
	.02						
	.01						
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	02						8
	03						
C _Y	.10 F	- 1			<u> </u>		
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	05						
	10 -8	4		4 8	3 12	16 20) 24
	J	·	Ť		deg	20 20	. 24



(a) longitudinal aerodynamics Figure 22. Case IV, Effect of suction at q=10, psf. $\,\delta_L=0^\circ,\,\delta_T=0^\circ.$

Run β , deg q $C_{q,avg}$



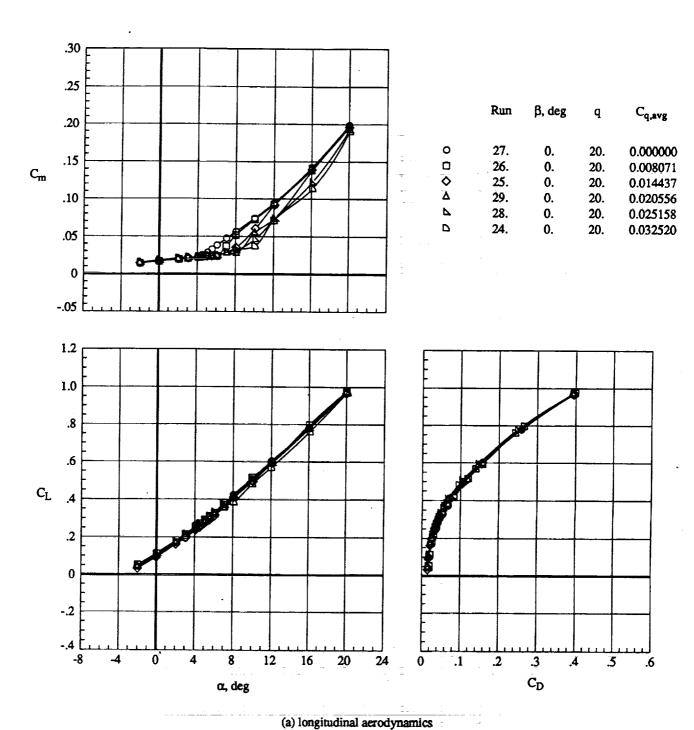
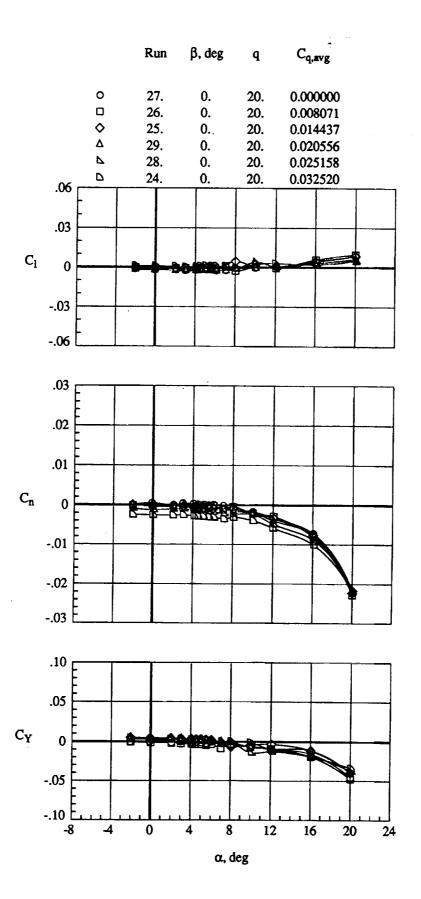
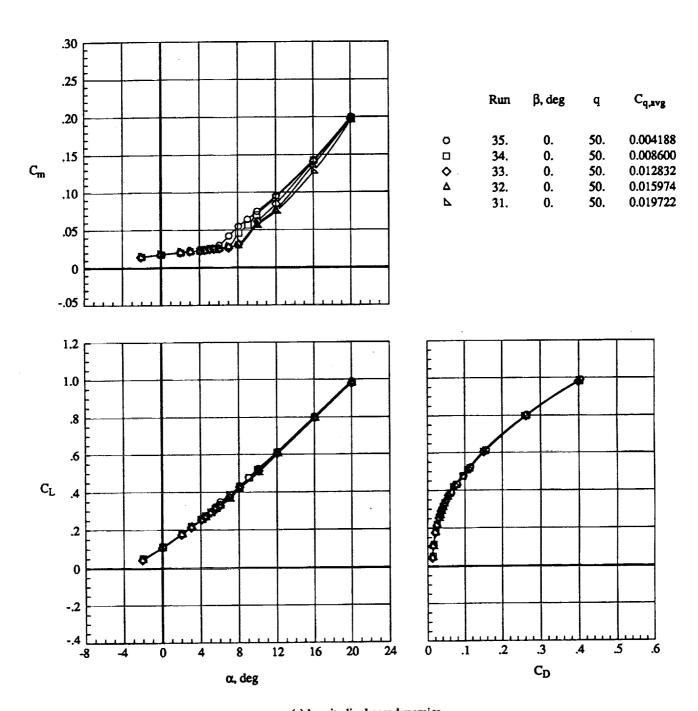
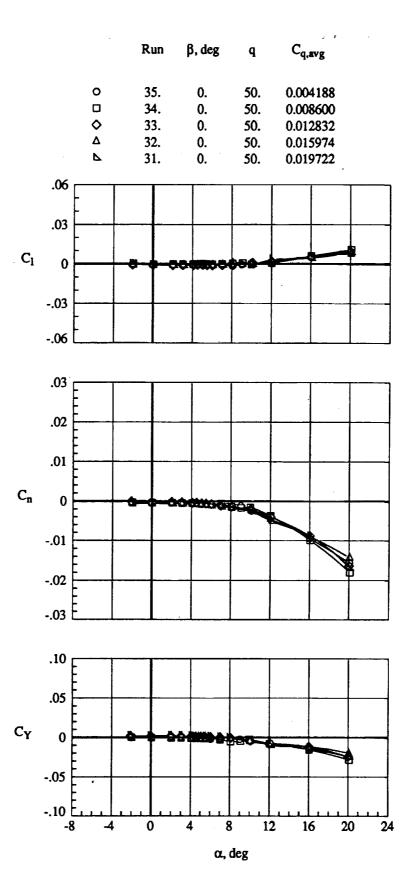


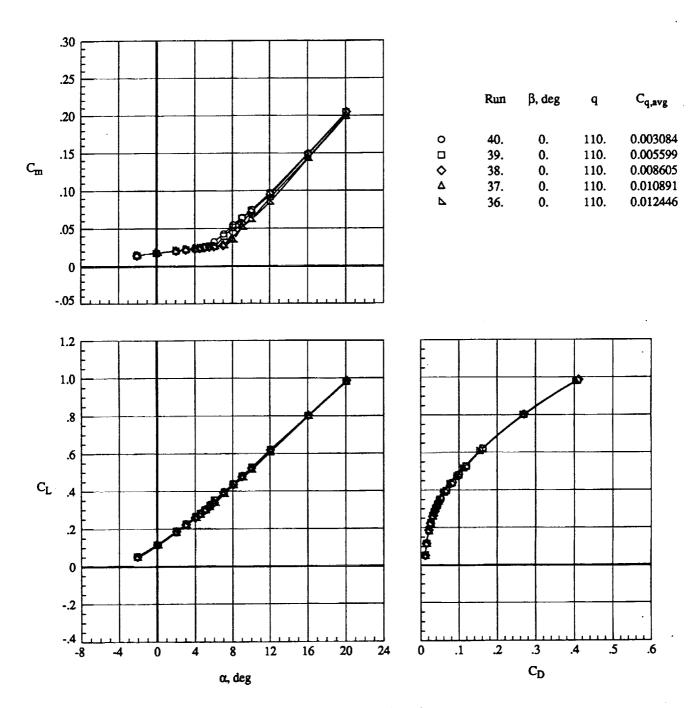
Figure 23. Case IV, Effect of suction at q = 20, psf. $\delta_L = 0^{\circ}$, $\delta_T = 0^{\circ}$.



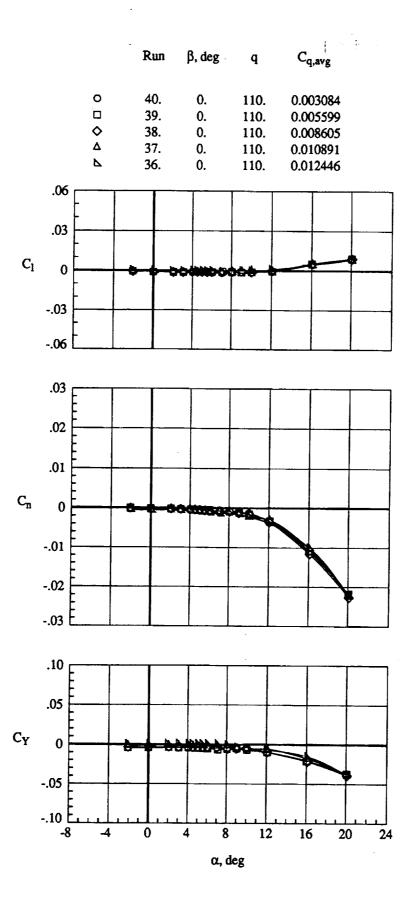


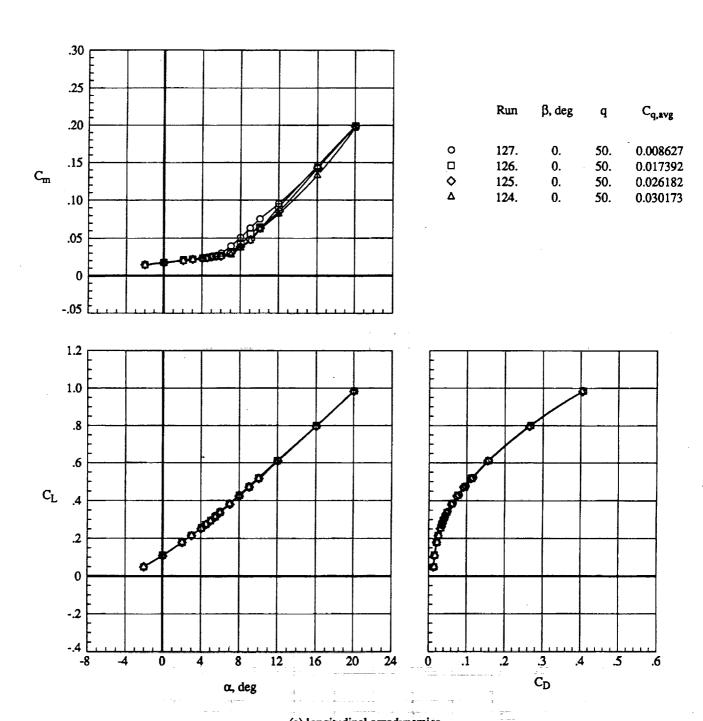
(a) longitudinal aerodynamics Figure 24. Case IV, Effect of suction at q=50, psf. $\,\delta_L=0^\circ,\,\delta_T=0^\circ.$



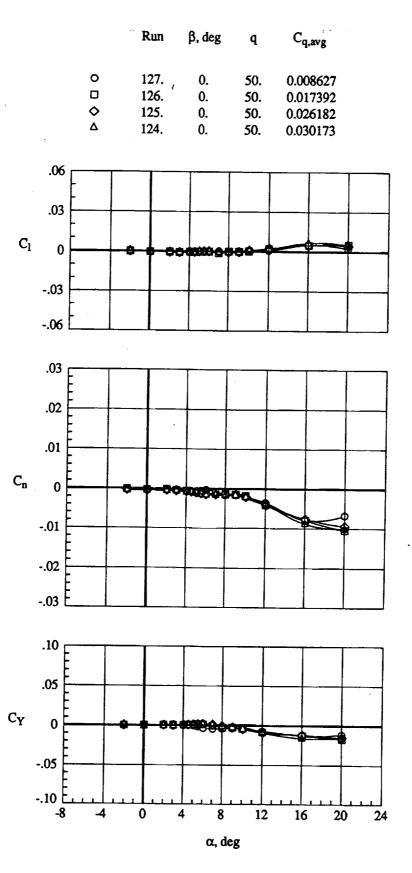


(a) longitudinal aerodynamics Figure 25. Case IV, Effect of suction at q = 110, psf. δ_L = 0°, δ_T = 0°.

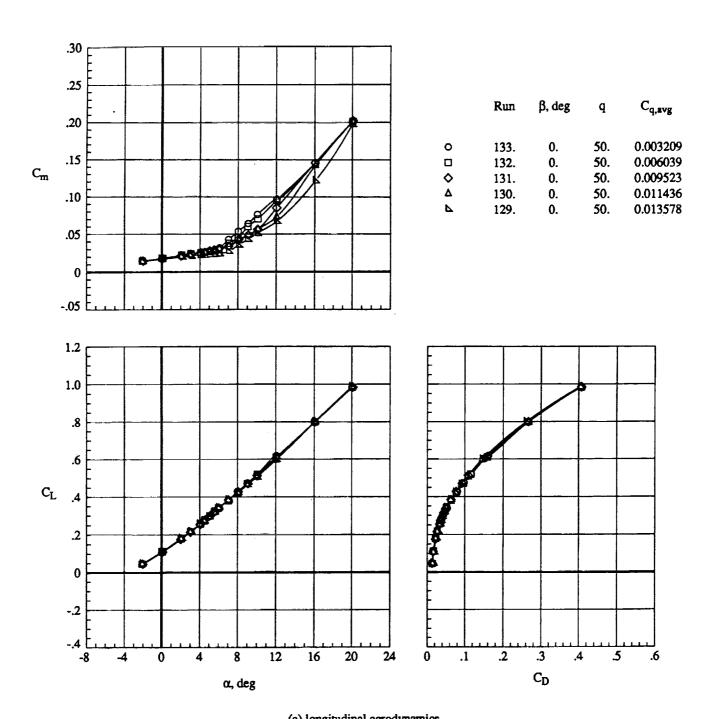




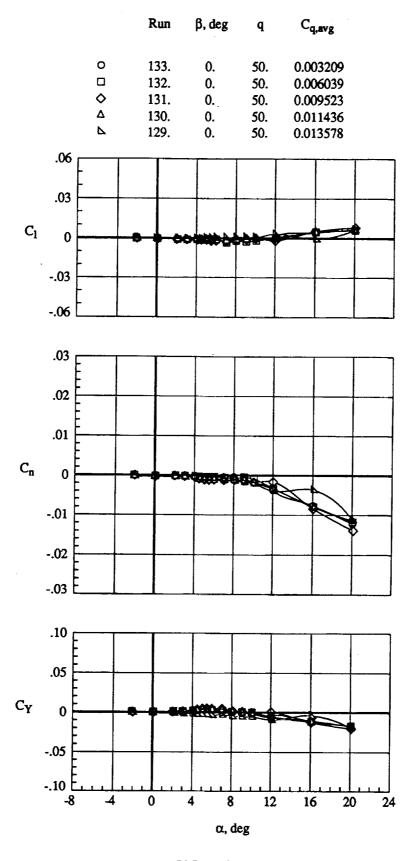
(a) longitudinal aerodynamics Figure 26. Case V, Effect of suction at q = 50, psf. δ_L = 0°, δ_T = 0°.



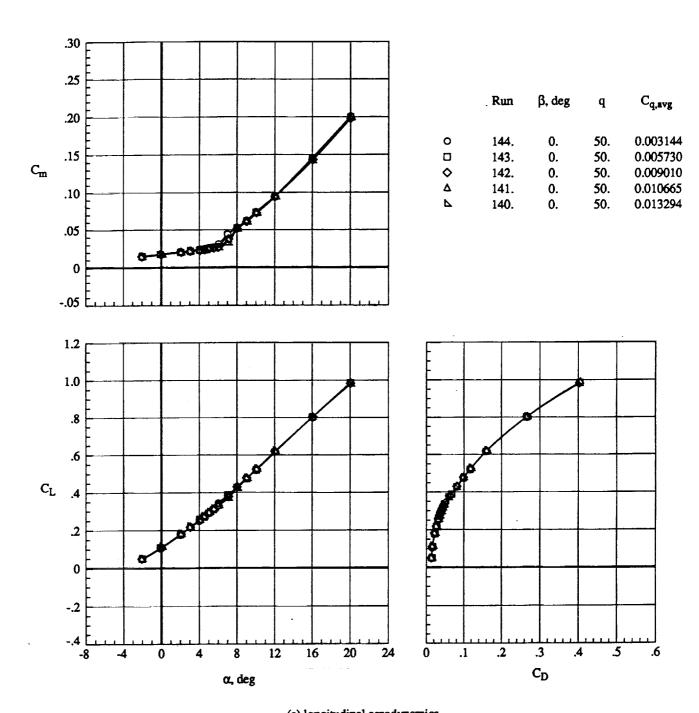
(b) Lateral aerodynamics Figure 26. Concluded.



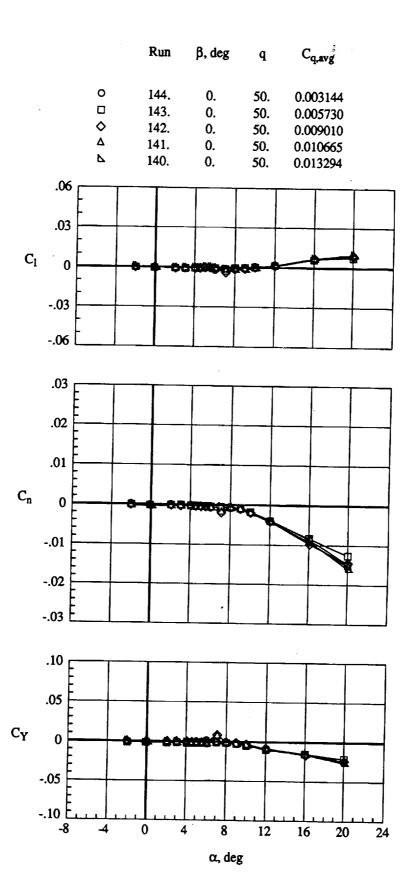
(a) longitudinal aerodynamics Figure 27. Case VII, Effect of suction at q = 50, psf. $\,\delta_L$ = 0°, δ_T = 0°.

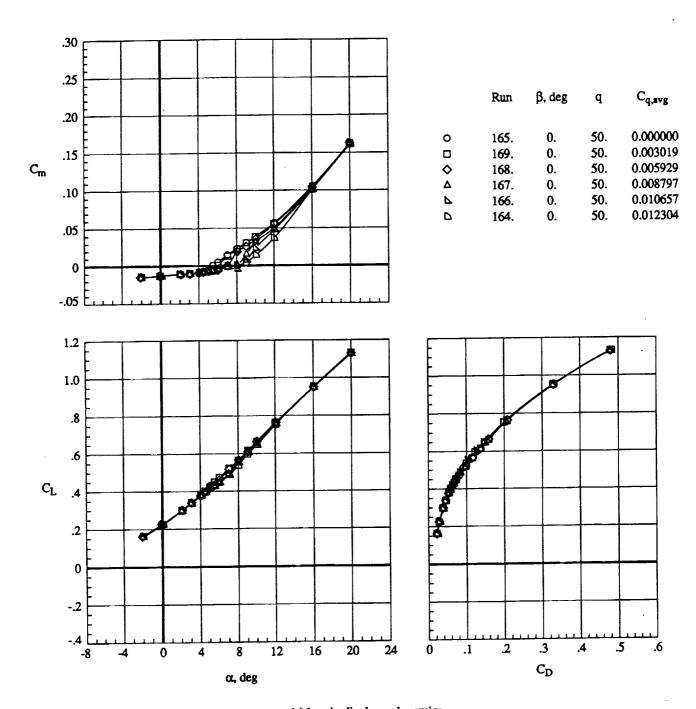


(b) Lateral aerodynamics Figure 27. Concluded.

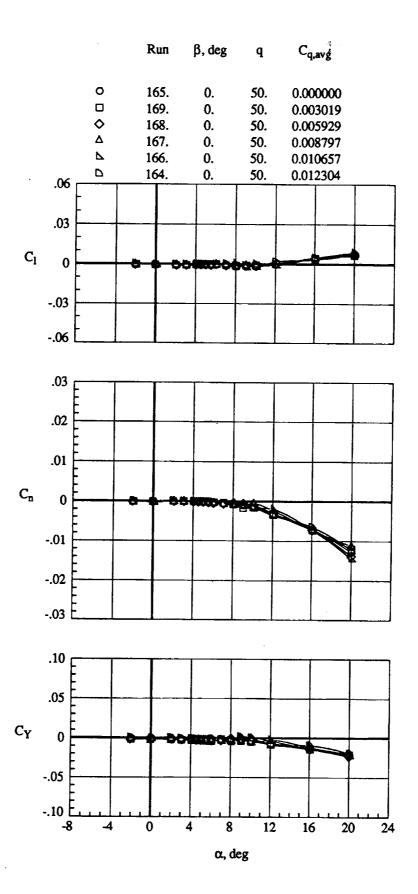


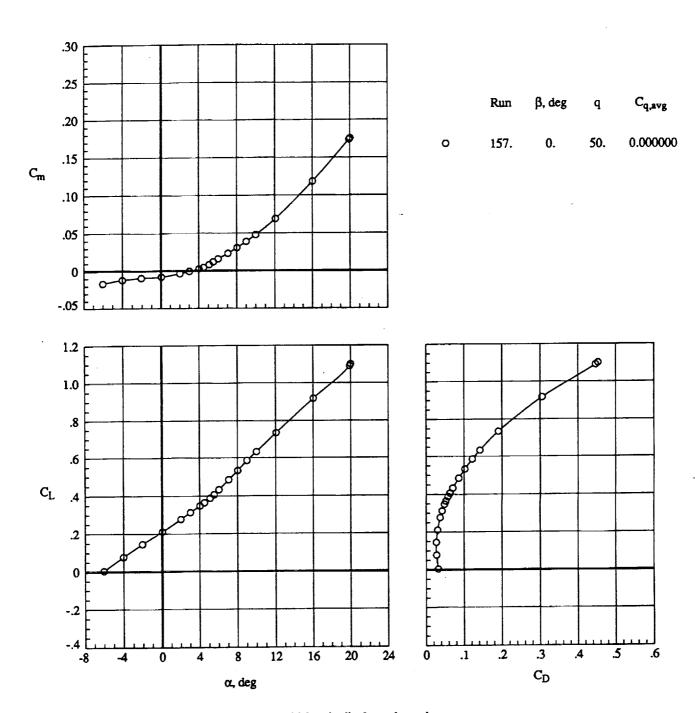
(a) longitudinal aerodynamics Figure 28. Case VIII, Effect of suction at q=50, psf. $\,\delta_L=0^\circ,\,\delta_T=0^\circ.$





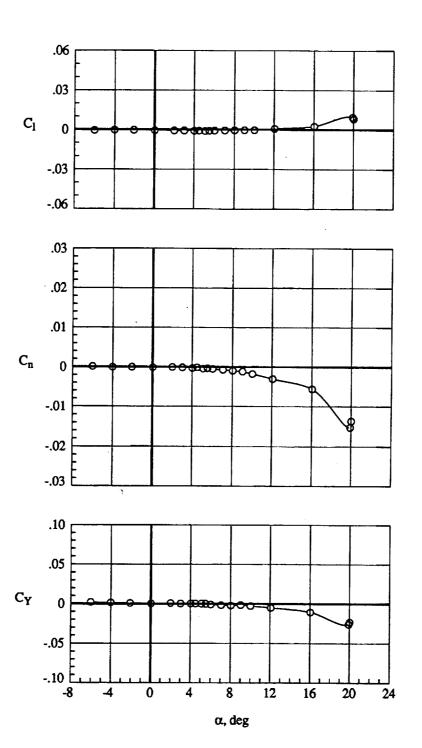
(a) longitudinal aerodynamics Figure 29. Case III, Effect of suction at q = 50, psf. δ_L = 0°, δ_T = 20°.

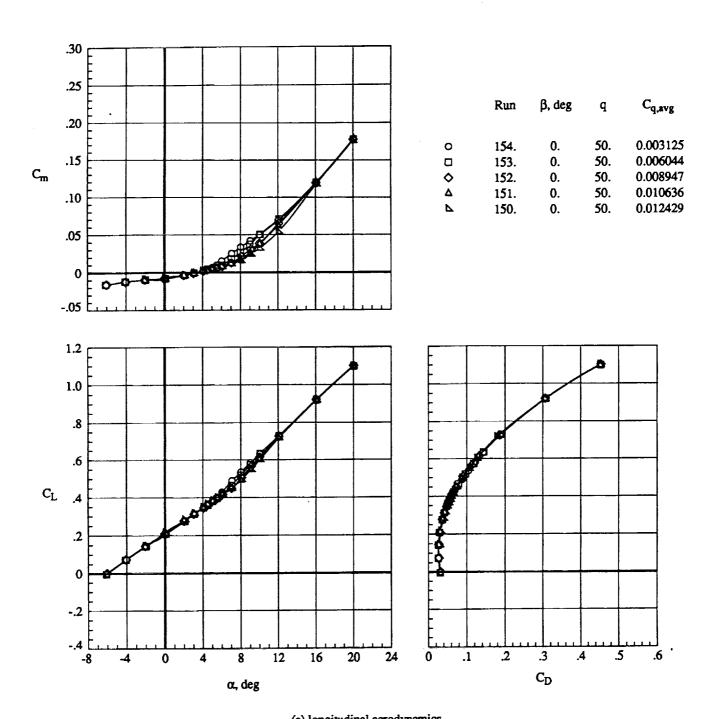




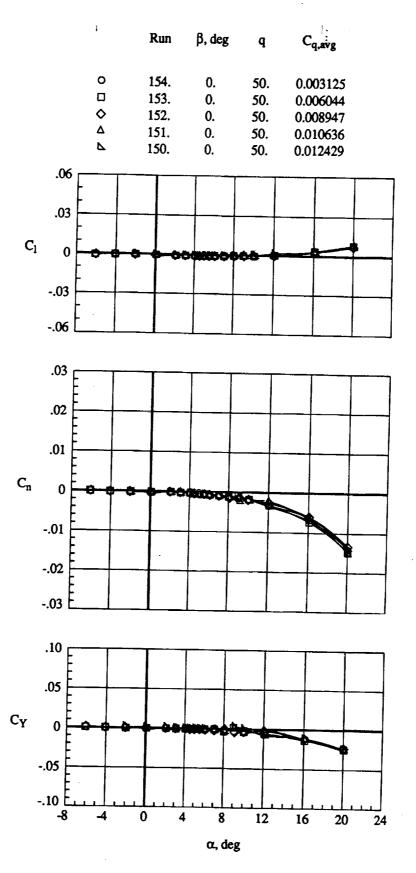
(a) longitudinal aerodynamics Figure 30. Case VI, Zero suction, q = 50, psf. δ_L = 30°, δ_T = 20°.

Run β , deg q $C_{q,avg}$





(a) longitudinal aerodynamics Figure 31. Case III, Effect of suction, at q = 50, psf. δ_L = 30°, δ_T = 20°.



(b) Lateral aerodynamics Figure 31. Concluded.

	Run	α, deg	q	C _{q,avg}
0	71.	4.	50.	0.013539
	72.	8.	50.	0.013299
\rightarrow	73.	12.	50.	0.013138

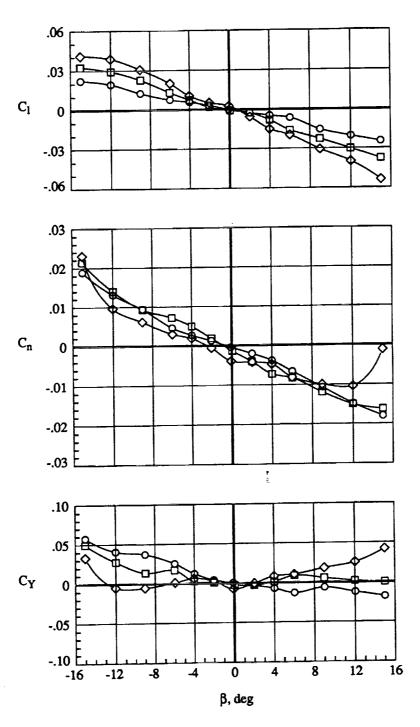


Figure 32. Case III, Effect of sideslip as a function of angle of attack. q = 50, psf. δ_L = 0°, δ_T = 0°.

	Run	α, deg	q	$C_{q,avg}$
0	76.	4.	50.	0.000000
	77.	8.	50.	0.000000
\Diamond	78.	12.	50.	0.000000

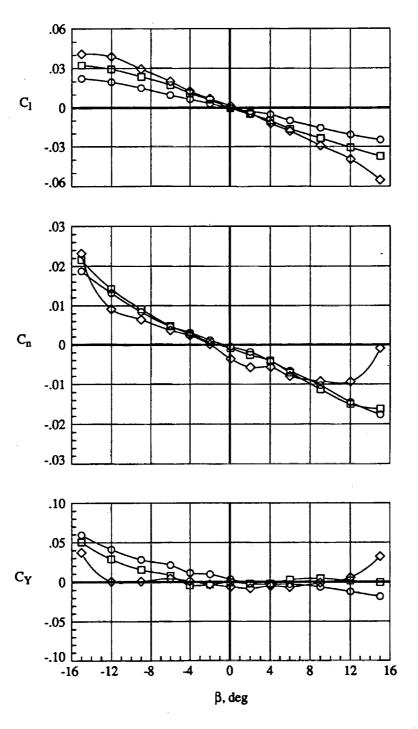


Figure 33. Case III, Effect of sideslip as a function of angle of attack. Zero suction, q = 50, psf. δ_L = 0°, δ_T = 0°.

	Run	a, deg	q	$C_{q,avg}$
0	81.	4.	50.	0.006008
	82.	8.	50.	0.005903
\Diamond	84.	12.	50.	0.005486

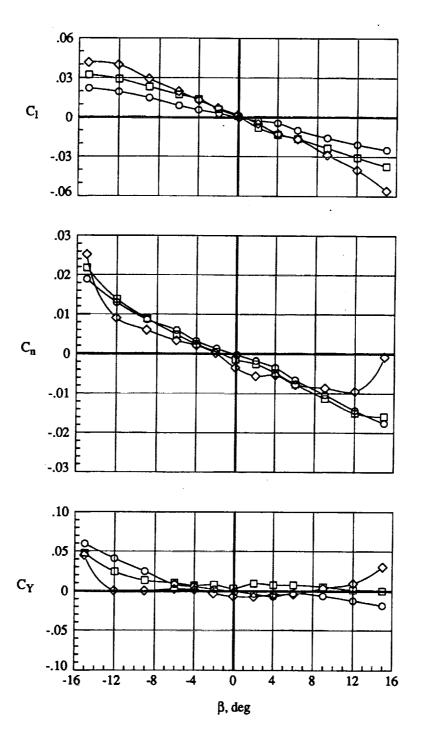
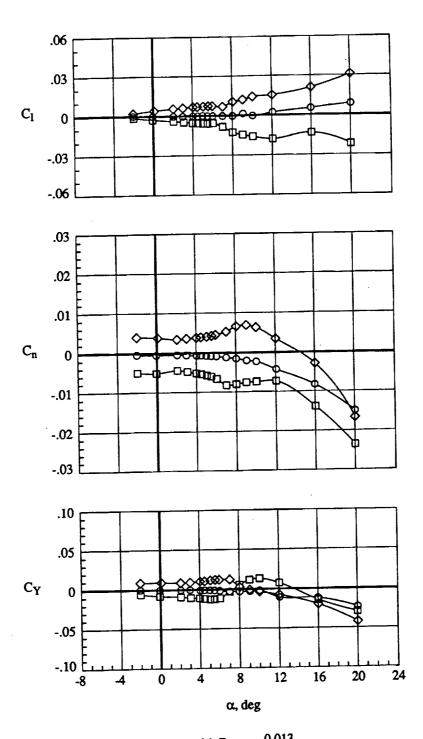


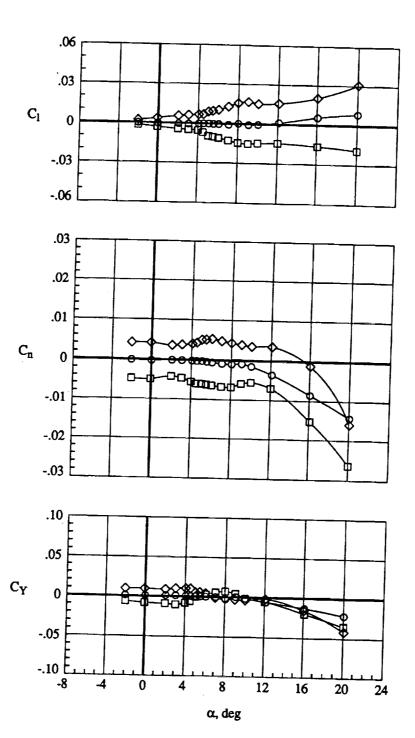
Figure 34. Case III, Effect of sideslip as a function of angle of attack. q=50, psf. $\delta_L=0^\circ$, $\delta_T=0^\circ$.

	Run	β, deg	q	Cq,avg
0	64.	0.	50.	0.014541
	69.	5.	50.	0.013381
\	70.	-5.	50.	0.013317

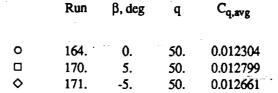


(a) $C_{q,avg} \approx 0.013$ Figure 35. Case III, Effect of sideslip while holding C_q near a fixed value. q = 50, psf. $\delta_L = 0^\circ$, $\delta_T = 0^\circ$.

	Run	β, deg	q	$C_{q,avg}$
0	48.	0.	50.	0.006068
	79.	5.	50.	0.005933
♦	80.	-5.	50.	0.005913



(b) $C_{q,avg} \approx 0.006$ Figure 35. Concluded



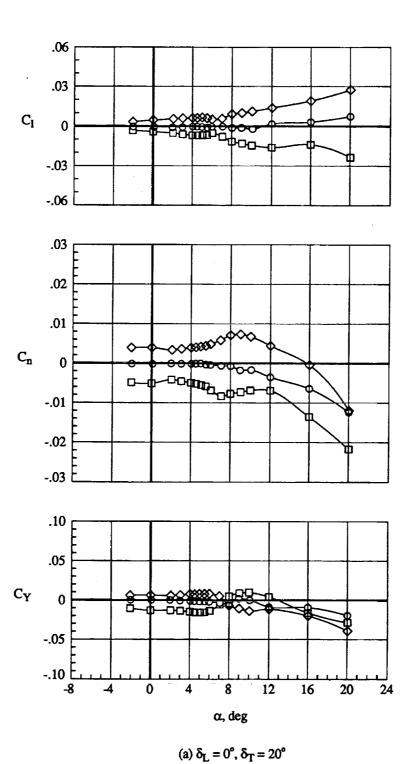
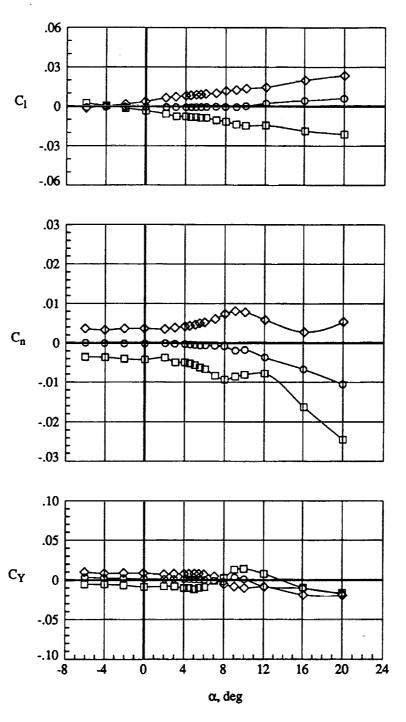


Figure 36. Case III, Effect of sideslip while holding C_q near a fixed value. q = 50, psf.

	Kun	β, deg	q	$C_{q,avg}$
0	172.	0.	50.	0.012898
	173.	5.	50.	0.012989
\	175.	-5.	50.	0.012772



(b) $\delta_L = 30^\circ$, $\delta_T = 20^\circ$ Figure 36. Concluded.

	Kun	p, aeg	q	Cq,avg
0	184.	0.	50.	0.000000
	185.	5.	50.	0.000000
\Q	186.	-5.	<i>5</i> 0.	0.000000

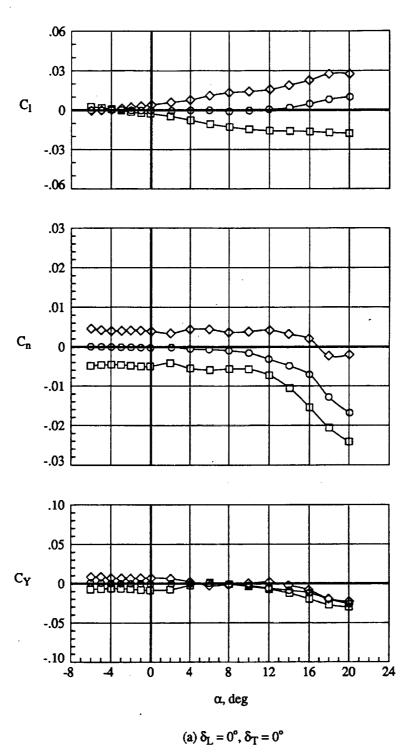
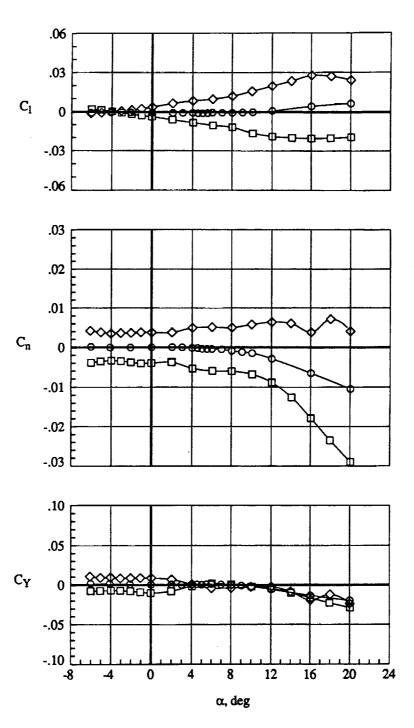


Figure 37. Case I, Effect of sideslip with porous leading edge open without suction. q = 50, psf.

	Run	β, deg	q	$C_{q,avg}$
0	181.	0.	50.	0.000000
	182.	5.	50.	0.000000
\rightarrow	183.	-5.	50.	0.000000



(b) $\delta_L = 30^\circ$, $\delta_T = 20^\circ$ Figure 37. Concluded.

	Run	β, deg	q	$C_{q,avg}$
0	67.	0.	50.	0.000000
	74.	5.	50.	0.000000
♦	75.	-5.	50.	0.000000

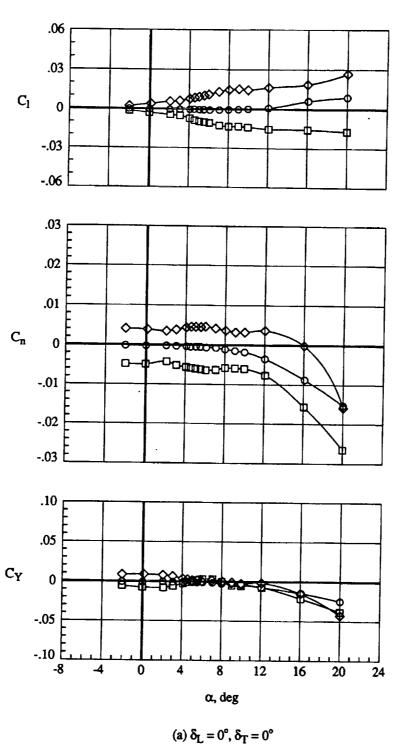
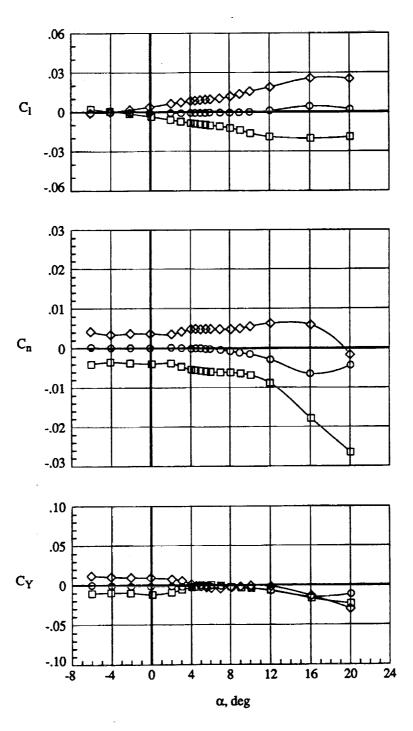


Figure 38. Case III, Effect of sideslip with porous leading edge partially open without suction. q = 50, psf.

	Kun	p, deg	q	Cq,avg
0	176.	0.	50.	0.000000
	177.	5.	50.	0.000000
\Diamond	174.	-5.	50.	0.000000



(b) $\delta_L = 30^{\circ}$, $\delta_T = 20^{\circ}$ Figure 38. Concluded.

	Run	β, deg	q	$C_{q,avg}$
0	187.	0.	50.	0.000000
	188.	5.	50.	0.000000
٥	189	-5	50	0.000000

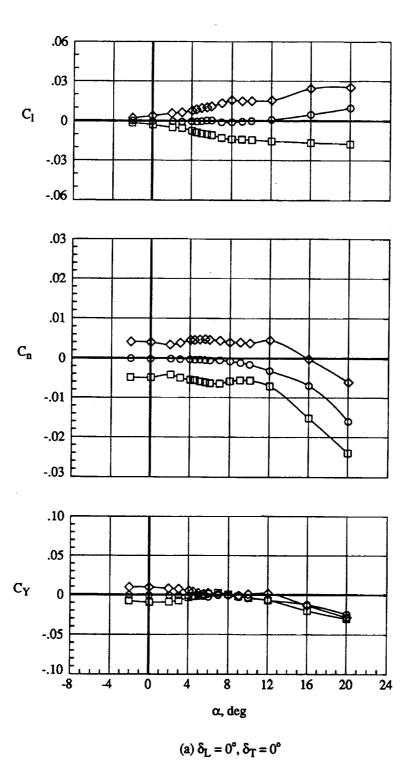
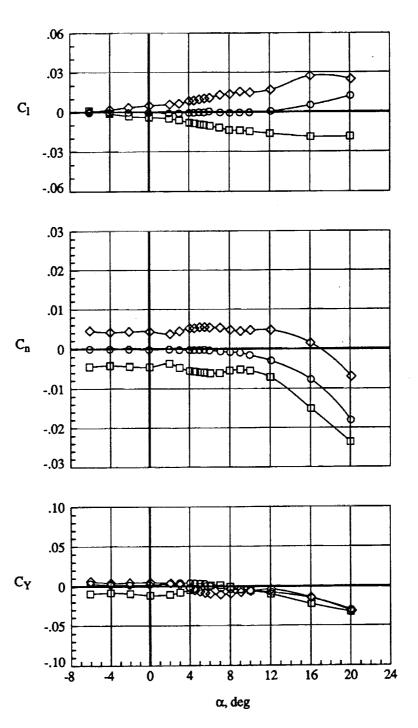


Figure 39. Case VI, Effect of sideslip with porous leading edge closed. q = 50, psf.

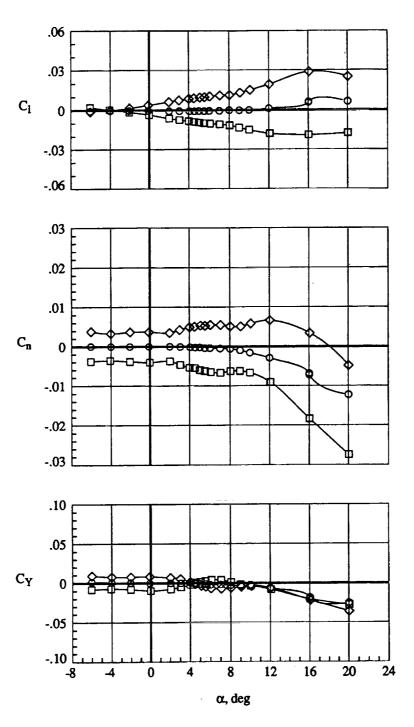
	Kuii	p, acg	ч	~q,avg
0	160.	0.	50.	0.000000
	161.	5.	50.	0.000000
٥	162.	-5.	50.	0.000000



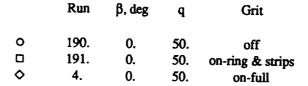
(b) $\delta_{\rm L}=0^{\circ}$, $\delta_{\rm T}=20^{\circ}$

Figure 39. Continued.

	Kun	p, deg	q	Cq,avg
				•
0	178.	0.	50.	0.000000
	179.	5.	50.	0.000000
\	180.	-5.	50.	0.000000



(c) $\delta_L = 30^{\circ}$, $\delta_T = 20^{\circ}$ Figure 39. Concluded.



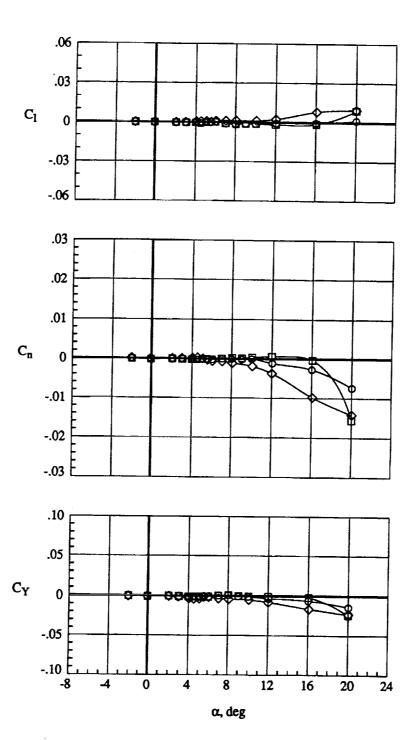


Figure 40. Case I, Effect of forebody boundary layer transition grit. q=50, psf. $\delta_L=0^\circ$, $\delta_T=0^\circ$

Appendix A

Intrumentation Accuracy

Forces and moments were measured with a six-component strin-gauge balance identified as NASA LaRC VST-3. The accuracy and error range for each component is as follows:

Component	Max Load Range	Error Range				
(lb or in-lb)						
Normal Force	±3000	±0.6%				
Axial Force	±500	±0.75%				
Pitching Moment	±10000	±0.5%				
Rolling Moment	±7500	±1.1%				
Yawing Moment	±4500	±1.4%				
Side Force	±1800	±0.8%				

The angle-of-attack sensor had an accuracy of $\pm 0.01^{\circ}$. Tunnel and atmospheric conditions were measured using standard facility instrumentation as described in reference 8.

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REPORT D	Form Approved OMB No. 0704-0188		
Public reporting burden for this collection of infor gathering and maintaining the data needed, and collection of information, including suggestions for Davis Highway, Suite 1204, Arlington, VA 22202-	completing and reviewing the collection of the	quarters Services, Directorate Budget, Paperwork Reduction	reviewing instructions, searching existing data sources, garding this burden estimate or any other aspect of this for Information Operations and Reports, 1215 Jefferson Project (0704-0188), Washington, DC 20503.
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE	3. REPORT TYPE AND Technical Memor	DATES COVERED
	December 1999		5. FUNDING NUMBERS
4. TITLE AND SUBTITLE Subsonic Investigation of a I System on a High-Speed Civ	WU 537-03-22-02		
6. AUTHOR(S) Bryan A. Campbell, Zachary D. Bruce Owens, Brenda E. C	T. Applin, Guy T. Kemmerl Gile, Pradip G. Parikh, and Do	y, Paul L. Coe, Jr., on Smith	
7. PERFORMING ORGANIZATION NA	8. PERFORMING ORGANIZATION REPORT NUMBER		
NASA Langley Research Cer Hampton, VA 23681-2199	L-17917		
9. SPONSORING/MONITORING AGEN		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
National Aeronautics and Sp. Washington, DC 20546-0001	NASA/TM-1999-209700		
11. SUPPLEMENTARY NOTES Campbell, Applin, Kemmer Boeing Commercial Airplar	ly, Coe, Owens, and Gile: Lanes, Seattle, WA.	ngley Research Cer	nter, Hampton VA; Parikh and Smith:
12a. DISTRIBUTION/AVAILABILITY S	TATEMENT		12b. DISTRIBUTION CODE
Unclassified-Unlimited Subject Category 02 Availability: NASA CASI	Distribution: Nonsta	ndard	
Transport (HSCT) configuration number range of 0.08 to 0.2 in the amount of suction, as	of a leading edge boundary is ation in the Langley 14- by 22 7, with corresponding chord is	Reynolds numbers on of the suction are effected 0° and 20°.	
14. SUBJECT TERMS High-speed civil transport;	ge suction 15. NUMBER OF PAGES 133		
			16. PRICE CODE A07
17. SECURITY CLASSIFICATION OF REPORT Unclassified	16. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASS OF ABSTRACT Unclassified	IFICATION 20. LIMITATION OF ABSTRACT UL Standard Form 298 (Rev. 2-89)